Collected papers

of

Lord Soumadeep Ghosh

Volume 5

A model of english-german war

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe a model of the english-german war. The paper ends with "The End"

Introduction

In this paper, I describe a model of the english-german war.

English-german war

The english-german war is defined as a war between the english state and the german state characterized by residual aggregates and co-efficients of combat capacities.

The model

The model of english-german war is given by the following equations:

$$M_E = M_E^0 - \alpha_G M_G$$

$$M_G = M_G^0 - \alpha_E M_E$$

where
M_E is the size of the military of the english state
M_G is the size of the military of german state
M_E^0 is the residual size of the military of english state
M_G^0 is the residual size of the military of german state
α_E is the combat capacity of the english state
α_G is the combat capacity of the german state
Note that this model can be solved in closed form.

The End

Lust options

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe lust options. The paper ends with "The End"

Introduction

Lust options are the best method to reduce lust in an economy. In this paper, I describe lust options.

Lust option

Measure lust in the economy by the regression

$$A_S = aL + b$$

where
A_S is sexual attraction
L is lust
a and b are regression coefficients

Let P be the price of a financial option that pays $\frac{e^L+e^{-L}}{2}$ in the lust-full state and 0 in the lust-free state.

Then

$$P = \frac{e^L + e - L}{2(1+r)} \geq \frac{1}{1+r}$$

Note that lust options **cannot** and **should not** be priced by a Black- Scholes model.

The End

The last paper

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the ultimate secret of political science. The paper ends with "The End"

Introduction

Many politicians and political scientists spend most of their lives trying to find the ultimate secret of political science. In this paper, I describe the ultimate secret of political science.

The ultimate secret of political science

The ultimate secret of political science is **"The polity never gets the leader the polity needs nor the leader the polity wants. The polity always gets the leader the polity deserves."**

The End

On why theft not only happens but is necessary in an economy.

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe why theft not only happens but is necessary in an economy. The paper ends with "The End"

Introduction

The fact that theft happens in an economy is well-known. One only needs to check police records to find instances of theft. In this paper, I describe using 4 cases why theft **not only** happens but is **necessary** in an economy.

Cases

1. The failing dictatorship.

   In such a situation, theft not only happens but is necessary.

2. What if the life of an individual depends on committing theft?

   In such a situation, theft not only happens but is necessary.

3. The compromised central bank.

   In such a situation, theft not only happens but is necessary.

4. When the king and/or queen clings to power at the expense of welfare of the individuals.

   In such a situation, theft not only happens but is necessary.

While it is possible to construct more cases, it should be clear that theft not only happens but is necessary in an economy from the above 4 cases.

The End

The dark arts

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the dark arts found in dark economies. The paper ends with "The End"

Introduction

There exist **the dark arts** in dark economies. The dark arts are not only **risky** but **harmful**. In this paper, I describe the dark arts found in dark economies.

The dark arts

1. **Assault** is attacking an individual.
2. **Abuse** is the use of an individual in a way that is wrong or harmful.
3. **Bank robbery** is theft from a bank.
4. **Bonded labour** is labour by individual by signing a bond.
5. **Betrayal** is the breaking of trust by a trusted individual.
6. **Brainwashing** is the psychological implantation of ideas in an individual.
7. **Biological attack** is an attack on the economy by an individual requesting bio-data.
8. **Blackmail** is the extraction of capital from an individual using private information and/or secrets.
9. **Cannibalism** is the consumption of individuals by an individual in the economy.
10. **Child labour** is the causing an individual of minor age into labour.
11. **Culture** is the use of cults on an economy.
12. **Curse** is the use of demoniac magic on an individual.

13. **Drugging** is the illegal use of medical goods and/or services on an individual.
14. **Defection** is the joining of an enemy's forces by an individual.
15. **Espionage** is the use of spies in the economy.
16. **Epistemic crime** is crime by the epistemologist of the economy.
17. **Extortion** is the extraction of capital from an individual by threatening or causing harm to a relative of the individual.
18. **Entrapment** is the instructing and/or ordering of an individual to commit a crime.
19. **Harassment** is the use of pressure tactics on an individual.
20. **Gang rape** is the raping of an individual by several individuals.
21. **Genocide** is the killing by a generation of individuals of subsequent generations.
22. **Immunization** is the granting of legal protection to an individual in exchange for private information and/or secrets.
23. **Incest** is sexual service between siblings.
24. **Indoctrination** is the teaching of religions other than Hinduism.
25. **Insider trading** is the trading of assets by an individual based on private information and/or secrets.
26. **Insubordination** is the disobeying of an order by an individual.
27. **Biased media** is the use of the media in a nation with intentional bias in coverage.
28. **Parley** is the trade of economists between two economies.
29. **Patsy** is the blaming of another individual by an individual.
30. **Piracy** is the theft of illegal goods and/or services.
31. **Pornography** is the filming and/or profit from sexual services.
32. **Prostitution** is the trade of sexual services for capital.
33. **Recording** is the use of audio and/or video capture on individuals.
34. **Regicide** is the killing of the king and/or queen of the economy by an individual.
35. **Sabotage** is deliberate damage to forces and/or buildings by an individual.

36. **Smuggling** is the illegal trade of goods and/or services.
37. **Trafficking** is the illegal trade of individuals.
38. **Treason** is causing danger and/or harm to the nation by an individual.
39. **Treachery** is disloyalty by an individual on trusting individuals.
40. **Kangaroo court** is an illegal court that tries individuals.

The End

The mathematics of partition

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the mathematics of partition. The paper ends with "The End"

Introduction

Partition is a fact of nation-states. In this paper, I describe the mathematics of partition.

The mathematics of partition

The mathematics of partition is straight-forward.

Whenever

$$e = \sum_{i=1}^{p} e_i$$

$$c = \sum_{i=1}^{p} c_i$$

$$\frac{2+e}{2-c} = \sum_{i=1}^{p} \frac{2+e_i}{2-c_i}$$

we have partition

where

p is number of partitions of the original nation-state.

e is expansionary forces in the original nation-state.

c is contractionary forces in the original nation-state.

e_i is expansionary force in the i^{th} partitioned nation-state.

c_i is contractionary force in the i^{th} partitioned nation-state.

The End

The orders of financial risk

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the orders of financial risk for economists. The paper ends with "The End"

Introduction

I was surprised to notice that many economists do not know about the orders of financial risk. For the benefit of all economies, in this paper, I describe the orders of financial risk.

The orders of financial risk

For a collection of n assets $A_i(t)$ where $1 \leq i \leq n$, we have **infinitely many** orders of financial risk as defined below:

The first order of financial risk

The first order of financial risk is given by

$$r_i^1(t) = \frac{A_i(t) - \mu}{\sigma}$$

where

$$\mu = \frac{\sum_{i=1}^{n} A_i(t)}{n}$$

$$\sigma = \sqrt{\frac{\sum_{i=1}^{n} \left(A_i(t) - \mu\right)^2}{n}}$$

The second order of financial risk

The second order of financial risk is given by

$$r_i^2(t) = \frac{r_i^1(t) - \mu}{\sigma}$$

where

$$\mu = \frac{\sum_{i=1}^{n} r_i^1(t)}{n}$$

$$\sigma = \sqrt{\frac{\sum_{i=1}^{n} \left(r_i^1(t) - \mu\right)^2}{n}}$$

The third order of financial risk

The third order of financial risk is given by

$$r_i^3(t) = \frac{r_i^2(t) - \mu}{\sigma}$$

where

$$\mu = \frac{\sum_{i=1}^{n} r_i^2(t)}{n}$$

$$\sigma = \sqrt{\frac{\sum_{i=1}^{n} \left(r_i^2(t) - \mu\right)^2}{n}}$$

and so on...

The End

Alchemy

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe alchemy. The paper ends with "The End"

Introduction

Many individuals wonder about alchemy. In this paper, I describe alchemy.

The Actors on the Alchemic Stage

1. The Almighty
2. The Father the King
3. The Son the Prince
4. The Allies of the Son
5. The Homonculus - the children of both the Divine and the Demoniac

The Items on the Alchemic Stage

1. The Throne
2. The Philosopher's Stone
3. The Transmutation Circle

The Acts of the Demoniac

The Demoniac offer their obeisances to the King and the Almighty.

The Chants of the Divine

The Divine chant the Hare Krishna Hare Rama mantra.

The Deed of the Son

The Son enters the transmutation circle and folds his hands.

The Production of Gold in the Transmutation Circle

The Transmutation by the Son produces Gold in The Transmutation Circle.

The Son proves his Mettle in Battle

The Son fights the Father.

The Father dies

The Father dies of old age.

The Son takes the Throne

The Prince becomes the King.

The End

The 2-symmetric-states solution to partition

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the 2-symmetric-states solution to partition. The paper ends with "The End"

Introduction

In a previous paper, I've described the mathematics of partition. In this paper, I describe the 2-symmetric-states solution to partition.

The 2-symmetric-states solution to partition

The 2-symmetric-states solution to partition is given by

$$p = 2$$

$$e = \frac{2}{c} - 3$$

The End

The 3-symmetric-states solution to partition

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the 3-symmetric-states solution to partition. The paper ends with "The End"

Introduction

In a previous paper, I've described the mathematics of partition. In this paper, I describe the 3-symmetric-states solution to partition.

The 3-symmetric-states solution to partition

The 3-symmetric-states solution to partition is given by

$$p = 3$$

$$e = \frac{4}{3c} - \frac{8}{3}$$

The End

The African genocide

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the African genocide. The paper ends with "The End"

Introduction

In a previous paper, I've described how genocide is a dark art. In this paper, I describe the African genocide.

The African genocide

In a previous research, I've described how Earth can exist at for at most 2021 seconds due to multiple Thucydides' traps involving the nuclear nations.

But unbeknownst to most individuals on Earth, there exists a "kill-switch" in Africa that eliminates most individuals from the planet within seconds of use.

Afrodeity ensured that the possibility of African genocide always exists. Afrodeity simply instructs the first generation African economists to instruct the first generation of Africans to abort the second generation of Africans. This causes the ancestors of 99% of Earth's population to simply vanish from existence within seconds of the instruction.

The End

Truths of economics

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the truths of economics. The paper ends with "The End"

Introduction

Many economists spend their entire lives searching for the truths of economics. In this paper, For the benefit of all economies, I describe the truths of economics.

Truths of economics

1. Individuals have to be controlled for their own good.
2. Individuals don't like being controlled.
3. Individuals being controlled rebel.
4. Go back to 1.

The End

The Δ equation

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the Delta equation. The paper ends with "The End"

Introduction

Most individuals pay attention to prices. Few individuals pay attention to rates. And even fewer individuals pay attention to the Δ. In this paper, I describe the Delta equation.

The Delta equation

The system

$$V(t+1) = V(t) + \Delta(t)$$

$$V(t+1) = V(t)(1 + r(t) + \Delta(t))$$

$$r(t+1) = r(t) + \Delta(t)$$

has the solution

$$\Delta(t) = \frac{V(t)r(t)}{1 - V(t)}$$

called the Delta equation
where
$V(t)$ is value as a function of time
$r(t)$ is rate as a function of time
$\Delta(t)$ is delta as a function of time

The End

Vega

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I define the vega measure between two assets. The paper ends with "The End"

Introduction

I was surprised to notice that many economists do not know about the vega measure between two assets. For the benefit of all economies, in this paper, I describe the vega measure between two assets.

Vega

For a collection of n assets $A_i(t)$ where $1 \leq i \leq n$, there exist ${}^nC_2 = \frac{n(n-1)}{2}$ **vega** measures between pairs of two assets as defined below:

$$ {}^iv_j = \frac{r_j - r_i}{\rho_j - \rho_i} $$

where
r_i is the return on the i^{th} asset
r_j is the return on the j^{th} asset
ρ_i is the risk of the i^{th} asset
ρ_j is the risk of the j^{th} asset

The End

Macro-prudential policy

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe macro-prudential policy. The paper ends with "The End"

Introduction

In a previous paper, I've described the vega measure between two assets in a collection of assets. In this paper, I describe macro-prudential policy.

Macro-prudential policy

Macro-prudential policy is the use of monetary policy and asset pricing to achieve an **equal** vega for all pairs of assets in the collection of assets.

The End

The theoretical price of a derivative and residual diagnostics

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the theoretical price of a derivative and residual diagnostics. The paper ends with "The End"

Introduction

In a previous paper, I've described the delta equation and the vega measure. In this paper, I describe the theoretical price of a derivative and residual diagnostics.

The theoretical price of a derivative

The theoretical price of a derivative is given by

$$P(t) = a\Delta(t) + bv$$

where
a is the clean price of the derivative
Δ is the delta as a function of time
b is the shadow price of the derivative
v is the vega measure

The empirical price of a derivative

The empirical price of a derivative is given by

$$P(t) = a\Delta(t) + bv + \epsilon$$

where
a is the clean price of the derivative
Δ is the delta as a function of time
b is the shadow price of the derivative
v is the vega measure
ϵ is the residual

Residual diagnostics

Residual diagnostics is the use of psychology to obtain $\epsilon = 0$

The End

The equations of love and wealth

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the equations of love and wealth. The paper ends with "The End"

Introduction

Many individuals wonder about love and wealth. In this paper, I describe the equations of love and wealth.

The equations of love and wealth

The equations of love and wealth are

$$W = GL + V$$

$$L = GW - V$$

$$\iff$$

$$L = \frac{-V}{1+G}$$

$$W = \frac{V}{1+G}$$

$$\iff$$

$$L + W = 0$$

$$W - L = \frac{2V}{1+G}$$

where
L is love
W is wealth
G is the Ghosh constant
V is the Vedic constant

The End

The equation of care

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the equation of care. The paper ends with "The End"

Introduction

Many individuals wonder about care. In this paper, I describe the equation of care.

The equation of care

The equation of care is

$$C_i = \frac{C_{i+1}}{1 + \frac{C_{i+1}}{1+C_i}}$$

where
C_i is care in the i^{th} period
r_i is rate in the i^{th} period

The End

A model of war financing

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe a model of war financing. The paper ends with "The End"

Introduction

In previous papers, I've described models for various types of war. In this paper, I describe a model of war financing.

A model of war financing

We have

$$v + d + l = 1$$

$$P = \frac{vL + dR - lD}{1 + r_f + p_w}$$

$$C = \frac{C + P}{1 + r_f + p_w}$$

$$r_f + p_w > 0$$

where
v is probability of victory
d is probability of draw
l is probability of loss
P is war profit
L is loot from victory
R is reparation from draw
$-D$ is impairment from loss
r_f is risk-free rate
p_w is war premium
C is cost of war

The End

The mathematics of ethnic pogrom

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the mathematics of ethnic pogrom. The paper ends with "The End"

Introduction

Ethnic pogrom is a reality in many nations. In this paper, I describe the mathematics of ethnic pogrom.

The mathematics of ethnic pogrom

The mathematics of ethnic pogrom is given by

$$P = P - v + v$$

$$P - v = \frac{P}{1 + r_f + p_p}$$

where
P is population of the nation
v is victims of ethnic pogrom
r_f is the risk-free rate
p_p is the pogrom premium

The End

The economic choice India faces

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the economic choice India faces. The paper ends with "The End"

Introduction

The time has come for India to make a choice. In this paper, I describe the economic choice India faces.

The economic choice India faces

This economic choice that India faces is a consequence of the logistic map. India has exactly 2 choices - either engage in quantitative easing of the money supply like the American and European economies or scale back to a small open macroeconomy like Switzerland.

The End

Biological weapons

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe biological weapons. The paper ends with "The End"

Introduction

The biological economy has several weapons for both attack and defense. In this paper, I describe biological weapons.

Biological weapons

1. **Biological bank**

   A bank that stores biological specimen, e.g., blood, bile, male semen and female eggs, for trade and/or blackmail and/or enslavement.

2. **Pathogen laboratory**

   A company that produces biological pathogens like bacteria, infectional germs and/or viruses.

3. **Poison factory**

   A factory that produces poisons, like cyanide, mustard gas etc

4. **Neurological laboratory**

   A company that produces nerve agents like VX, Novichok etc.

5. **Drug factory**

   A factory that produces drugs like cocaine, heroin, LSD etc.

6. **Genetic laboratory**

   A company that conducts genetic research and offers genomic services.

7. **Kindergarten/Nursery**

   A company that offers child support services and/or blackmail and/or enslavement

The End

The warfare economist's problem

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the warfare economist's problem. The paper ends with "The End"

Introduction

In a previous paper, I've described a model of war financing. In this paper, I describe the warfare economist's problem.

The warfare economist's problem

Setting $v = 1, d = 0, l = 0$ and solving the equation gives

$$r_f + p_w = -1 + \sqrt{1 + \frac{4L}{C}}$$

and

$$r_f + p_w = -1 - \sqrt{1 + \frac{4L}{C}}$$

The warfare economist's problem is finding solutions $r_f(t)$, $p_w(t)$, $L(t)$ and $C(t)$ such that the correlation between them is minimized.

The End

Fascist methods

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe fascist methods. The paper ends with "The End"

Introduction

Knowledge has been demanded of me of fascist methods. In this paper, I describe fascist methods.

Fascist methods

1. **Bombing**
   Use of chemicals like dynamite, KNO_3, $C4$, Semtex etc. to cause explosions.
2. **Monitoring communications of political opponents**
   Self-explanatory.
3. **Distribution of weapons**
   Producing and supplying weapons to the population.
4. **Electoral fraud**
   Holding of sham elections to appease foreign media.
5. **Formation of parliament**
   Building a circular building in the center of the capital housing political dissidents.
6. **Firing the parliament by the dictator**
   Self-explanatory.
7. **Inciting riots and/or strikes at competing firms**
   Self-explanatory.
8. **Bankrolling the police**
   Use of banks and/or financial services by the police.
9. **Surrounding the reserve/central/national bank**
   Self-explanatory.
10. **Execution of political dissidents by methods of execution:**
    (a) Hanging till death.
    (b) Electric chair.
    (c) Heated rat bucket.
    (d) Poisoning till death.
    (e) Boiling alive.

The End

The equation of a company

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the equation of a company. The paper ends with "The End"

Introduction

Knowledge has been demanded of me of the equation of a company. In this paper, I describe the equation of a company.

The equation of a company

The equation of a company is

$$C = P + I + c - l$$

where
C is capital of the company.
P is principal of the company.
I is interest of the company.
c is costs of the company.
l is liabilities of the company.

The End

Operations Research summarized

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the summary of Operations Research. The paper ends with "The End"

Introduction

Operations Research can be summarized in one sentence. In this paper, I describe the summary of Operations Research.

The summary of Operations Research

Old coins can be turned into rusted blades.

The End

There is no correct theory of computation

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I give a proof of the fact there is no correct theory of computation. The paper ends with "The End"

Introduction

There exist several theories of computation in the universe. But there is no correct theory of computation. In this paper, I give a proof of the fact there is no correct theory of computation.

Proof

Suppose there exists a correct theory of computation **T**.

Then **T** must have two functions $f(x)$ and $f^{-1}(x)$ such that for arbitrary reals i and o we have $o = f(i)$ and $i = f^{-1}(o)$

Consider the equations $i = f^{-1}(f(i))$ and $o = f(f^{-1}(o))$.

Since these two equations hold for arbitrary reals, we must have

$0 = f^{-1}(f(0))$

$1 = f^{-1}(f(1))$

and

$2 = f^{-1}(f(2))$

But now we have 3 reals whose sum is 3 by **T** and so these must be the only reals in **T**.

But this is impossible since there exist infinitely many reals by **T**.

Hence the contradiction.

The End

Hindi

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe Hindi. The paper ends with "The End"

Hindi

Sometimes man does things out of hobby that cause him no shock. How shocking is that?

The End

Tamil

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe Tamil. The paper ends with "The End"

Tamil

Tamil is the devil's language.

The End

Sanskrit

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe Sanskrit. The paper ends with "The End"

Sanskrit

Sanskrit is the language of Vishnu.

The End

Bangla

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe Bangla. The paper ends with "The End"

Bangla

Bangla is the language of Kalki.

The End

Telugu

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe Telugu. The paper ends with "The End"

Telugu

Telugu is the language of the dravidians.

The End

Norsk

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe Norsk. The paper ends with "The End"

Norsk

Norsk is the language of the narak.

The End

Hebrew

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe Hebrew. The paper ends with "The End"

Hebrew

Hebrew is the language of the jews.

The End

German

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe German. The paper ends with "The End"

German

German is the language of the germane economy.

The End

French

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe French. The paper ends with "The End"

German

French is the language of the parisian economy.

The End

The story of Bengal

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the story of Bengal. The paper ends with "The End"

The story of Bengal

There were 14 kings in Bengal since antiquity with names like Dutta, Ghosh, Bose, Guha, Mitra etc. in perfect harmony with nature and each other.

But others like the Hindus and the English arrived in Bengal and sowed the seeds of hate among the kings. So there became 16 kings.

But an economy can have only 14 sub-economies in them and so the Hindus and the English were enslaved by the original 14 kingdoms.

And that is how the enslavement of humanity began. This won't stop because somebody might come up with mathematics that reduces the number of sub-economies further.

Welcome to reality!

The End

The fundamental equations of alphabetical language

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the fundamental equations of alphabetical language. The paper ends with "The End"

Introduction

All alphabetical languages obey **the fundamental equations of alphabetical language**. In this paper, I describe the fundamental equations of alphabetical language.

The fundamental equations of alphabetical language

The fundamental equations of alphabetical language are

$$A = V \cup (A - V)$$

$$\phi = V \cap (A - V)$$

where
A is the set of **alphabets** of the language
V is the set of **vowels** of the language
$(A - V)$ is the set of **consonants** of the language

The End

The fundamental equations of demoniac language

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the fundamental equations of demoniac language. The paper ends with "The End"

Introduction

All demoniac languages obey **the fundamental equations of demoniac language**. In this paper, I describe the fundamental equations of demoniac language.

The fundamental equations of demoniac language

The fundamental equations of demoniac language are

$$A = V \cup (A - V)$$

$$\phi \neq V \cap (A - V)$$

where
A is the set of **alphabets** of the language
V is the set of **vowels** of the language
$(A - V)$ is the set of **consonants** of the language

The End

Nuclear threats originating in Narendra Damodardas Modi

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the nuclear threats originating in Narendra Damodardas Modi. The paper ends with "The End"

Introduction

I've detected nuclear threats to India, Russia and the United States of America originating in Narendra Damodardas Modi. Narendra Damodardas Modi is about to launch a nuclear offensive against his own nation-state as he has lost control of the economy due to strange (and probably fascist) monetary policy bv the Reserve Bank of India.

The End

Technological weapons

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe technological weapons. The paper ends with "The End"

Introduction

The technological economy has several weapons for both attack and defense. In this paper, I describe technological weapons.

Technological weapons

1. **Loaded language**
   Use of language that uses simile and/or triggers.
2. **Robotics**
   Production of robots for war and/or enslavement.
3. **Social network**
   Use of technology in social sciences.
4. **Artificial intelligence**
   Intelligence that is either sub-human or super-human.
5. **Adware**
   Technological goods and/or services to advertise to the technological economy.
6. **Malware/Code injection**
   Technological goods and/or services to inject malicious code into the technological economy.
7. **Spyware**
   Technological goods and/or services to monitor the technological economy.
8. **Computers**
   Technological goods and/or services that can be used to fool individuals since no theory of computation is correct.

The End

Weapons of the journalists

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe weapons of the journalists. The paper ends with "The End"

Introduction

Journalists have several weapons for both attack and defense. In this paper, I describe weapons of the journalists.

Weapons of the journalists

1. **Registration/Subscription**
   Induction of an individual to the economy of the journalists.
2. **Publishing**
   The printing and dissemination of journalistic work.
3. **Misinformation/Libel**
   Publishing false stories.
4. **Malign**
   Publishing the crime(s) of an individual.
5. **Interview**
   Face-to-face conversation and/or rhetoric with an individual.
6. **Online journal**
   Use of technology to publish regular work.
7. **Association**
   Use of technology to find like-minded journalists.
8. **Media house**
   A building and/or firm and/or company to house journalists.

The End

The origin of language

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the origin of language. The paper ends with "The End"

Introduction

Knowledge has been demanded of me of the origin of language. In this paper, I describe the origin of language.

Pangea, Eli and Paali

A long time ago, Earth had only one super-continent called Pangea. On Pangea, lived a man named Eli the prophet. Eli studied the Gita, the Quran and the Bible and gained knowledge of both the divine and the demoniac. He set out to write this knowledge down in the sand and created the first language of man that existed. Eli named the language Paali.

The End

Brain-mapping

Soumadeep Ghosh

Kolkata, India

Abstract

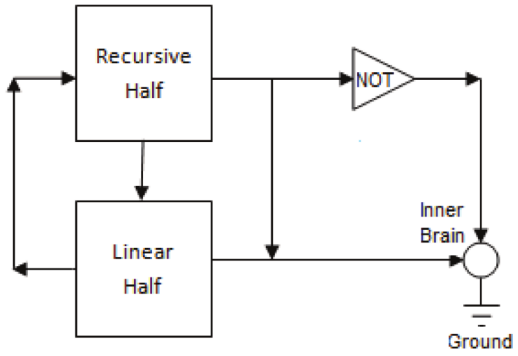
In this paper, I describe the art of brain-mapping. The paper ends with "The End"

Introduction

Brain-mapping is a technique from neuroscience that is useful to all individuals. In this paper, I describe the art of brain-mapping.

Brain-mapping

Any individual can use brain-mapping by looking at the following diagram:



The End

The Newtonian brain

Soumadeep Ghosh

Kolkata, India

Abstract

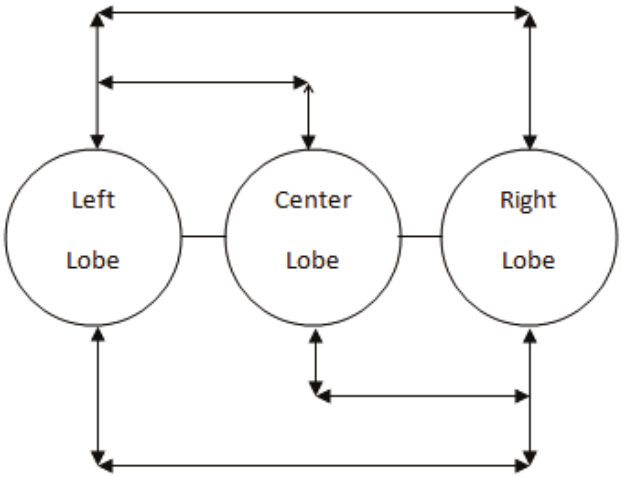
In this paper, I describe the Newtonian brain. The paper ends with "The End"

Introduction

The Newtonian brain is the simplest symmetric brain possible with 3 lobes. In this paper, I describe the Newtonian brain.

The Newtonian brain

The Newtonian brain can be understood by looking at the following diagram:



The End

The Einsteinian brain

Soumadeep Ghosh

Kolkata, India

Abstract

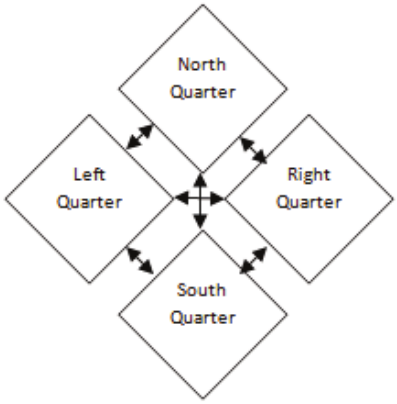
In this paper, I describe the Einsteinian brain. The paper ends with "The End"

Introduction

The Einsteinian brain is the simplest symmetric brain possible with 4 quarters. In this paper, I describe the Einsteinian brain.

The Einsteinian brain

The Einsteinian brain can be understood by looking at the following diagram:



The End

The Schwarzian brain

Soumadeep Ghosh

Kolkata, India

Abstract

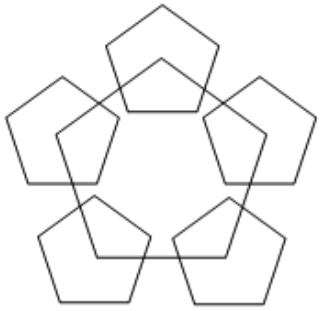
In this paper, I describe the Schwarzian brain. The paper ends with "The End"

Introduction

The Schwarzian brain is the simplest symmetric brain possible with 5 pieces. In this paper, I describe the Schwarzian brain.

The Schwarzian brain

The Schwarzian brain can be understood by looking at the following diagram:



The End

Three-step brain decontamination

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe three-step brain decontamination. The paper ends with "The End"

Introduction

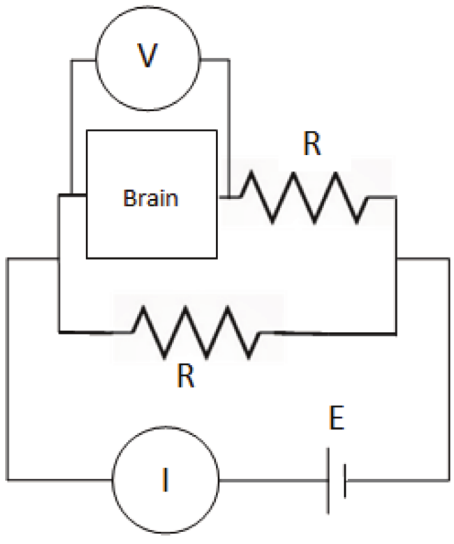
Three-step brain decontamination is a standard technique from neuroscience that is useful to all individuals. In this paper, I describe three-step brain decontamination.

Three-step brain decontamination

Any individual can perform **three-step brain decontamination** as described below:

1. Chemical washing of the inner brain is performed with a psychoactive cleaning agent like ethyl alcohol.
2. Chemical washing of the outer brain is performed with a psychoactive cleaning agent like toluene.
3. Electro-conductive balancing of the brain is performed with the following circuit:

Circuit for electro-conductive balancing of the brain



The circuit is run until $V = IR$.

The End

Enlightenment

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe enlightenment. The paper ends with "The End"

Introduction

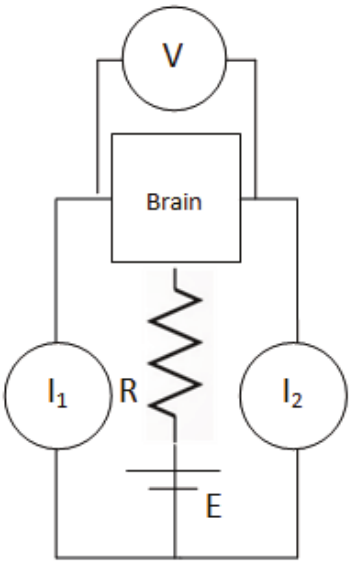
Enlightenment is a standard technique from neuroscience that is useful to all individuals.

In this paper, I describe enlightenment.

Enlightenment

Any individual can perform **enlightenment** using the following circuit:

Circuit for enlightenment of the brain



The circuit is run until $I_1 = I = I_2$ and $V = IR$.

The End

Divine intervention to rescue the demoniac

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the divine intervention to rescue the demoniac. The paper ends with "The End"

Introduction

Contrary to popular belief, divine intervention to rescue the demoniac happens. In this paper, I describe the divine intervention to rescue the demoniac.

Divine intervention to rescue the demoniac

In a previous paper, I've described enlightenment. As of this writing, the demoniac Narendra Damodardas Modi and the demoniac Mamata Banerjee need to be rescued. I recommend using magic and medical neuroscience to rescue both by enlightening them.

The End

The yield premium

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the yield premium between government bonds of two nations. The paper ends with "The End"

Introduction

There exists yield premium between government bonds of any two nations. In this paper, I describe the yield premium between government bonds of two nations.

The yield premium

The yield premium between government bonds of two nations is given by

$$max(y_A, y_B) - min(y_A, y_B) = \frac{min(y_A, y_B)}{1 + min(y_A, y_B) + p_y}$$

where
y_A is the yield in government bond from nation A
y_B is the yield in government bond from nation B
$max()$ is the maximum function
$min()$ is the minimum function
p_y is the yield premium between government bonds of nations A and B

The End

Yield and duration of a government bond

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the yield and duration of a government bond. The paper ends with "The End"

Introduction

I was surprised to note that many economists don't know the definitions of yield and duration of a government bond. In this paper, I describe the yield and duration of a government bond for all economies.

Yield and duration of a government bond

The yield and duration of a government bond is given by

$$P(t)(1 + y(t)D(t))^{D(t)} = P(t + 1)$$

where
$P(t)$ is the price of the bond as a function of time
$y(t)$ is the yield of the bond as a function of time
$D(t)$ is the duration of the bond as a function of time

The End

14 solutions to the mathematics of ethnic pogrom

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 solutions to the mathematics of ethnic pogrom. The paper ends with "The End"

Introduction

In a previous paper, I have described the mathematics of ethnic pogrom. In this paper, I describe 14 solutions to the mathematics of ethnic pogrom.

14 solutions to the mathematics of ethnic pogrom

1. $P = 9, v = \frac{3}{4}, r = \frac{9}{556}, p = \frac{457}{6116}$
2. $P = 48, v = \frac{35}{3}, r = \frac{1}{15}, p = \frac{416}{1635}$
3. $P = 360, v = 23, r = \frac{17}{370}, p = \frac{2781}{124690}$
4. $P = 390, v = 20, r = \frac{40}{1869}, p = \frac{2258}{69153}$
5. $P = 549, v = 21, r = \frac{11}{1270}, p = \frac{3477}{111760}$
6. $P = 603, v = 90, r = \frac{59}{576}, p = \frac{799}{10944}$
7. $P = 782, v = 41, r = \frac{16}{913}, p = \frac{25577}{676533}$
8. $P = 930, v = 96, r = \frac{43}{878}, p = \frac{8071}{122042}$
9. $P = 977, v = 98, r = \frac{13}{453}, p = \frac{3663}{44243}$
10. $P = 1007, v = 72, r = \frac{5}{82}, p = \frac{1229}{76670}$
11. $P = 1039, v = 15, r = \frac{38}{6895}, p = \frac{64513}{7060480}$
12. $P = 1062, v = 91, r = \frac{4}{77}, p = \frac{3123}{74767}$
13. $P = 1218, v = 46, r = \frac{2}{99}, p = \frac{1105}{58014}$
14. $P = 1247, v = 20, r = \frac{93}{6197}, p = \frac{9829}{7603719}$

The End

14 solutions to low bond yields with integral prices and duration

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 solutions to low bond yields with integral prices and duration. The paper ends with "The End"

Introduction

In a previous paper, I have described the yield and duration of a government bond. In this paper, I describe 14 solutions to low bond yields with integral prices and duration.

14 solutions to low bond yields with integral prices and duration

1. $y(t) = 0.0254706, D(t) = 2, P(t+1) = 74, P(t) = 67$
2. $y(t) = 0.0270982, D(t) = 10, P(t+1) = 11, P(t) = 1$
3. $y(t) = 0.00222194, D(t) = 18, P(t+1) = 79, P(t) = 39$
4. $y(t) = 0.000759831, D(t) = 21, P(t+1) = 99, P(t) = 71$
5. $y(t) = 0.00162079, D(t) = 27, P(t+1) = 89, P(t) = 28$
6. $y(t) = 0.00138897, D(t) = 44, P(t+1) = 68, P(t) = 5$
7. $y(t) = 0.000174209, D(t) = 45, P(t+1) = 27, P(t) = 19$
8. $y(t) = 0.000349473, D(t) = 48, P(t+1) = 80, P(t) = 36$
9. $y(t) = 0.000199113, D(t) = 50, P(t+1) = 64, P(t) = 39$
10. $y(t) = 0.000379787, D(t) = 52, P(t+1) = 47, P(t) = 17$
11. $y(t) = 0.0000100807, D(t) = 58, P(t+1) = 60, P(t) = 58$
12. $y(t) = 0.0000240576, D(t) = 70, P(t+1) = 99, P(t) = 88$
13. $y(t) = 0.0000942743, D(t) = 88, P(t+1) = 60, P(t) = 29$
14. $y(t) = 0.0000112415, D(t) = 88, P(t+1) = 96, P(t) = 88$

The End

14 solutions to singular yield with high price and integral duration

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 solutions to singular bond yield with high price and integral duration. The paper ends with "The End"

Introduction

In a previous paper, I have described the yield and duration of a government bond. In this paper, I describe 14 solutions to singular bond yield with high price and integral duration.

14 solutions to singular bond yield with high price and integral duration

1. $y(t) = 1, D(t) = 9, P(t) = 9, P(t+1) = 9 \times 10^9$
2. $y(t) = 1, D(t) = 48, P(t) = 35, P(t+1) = 4.71498... \times 10^{82}$
3. $y(t) = 1, D(t) = 360, P(t) = 23, P(t+1) = 1.1596329... \times 10^{922}$
4. $y(t) = 1, D(t) = 390, P(t) = 20, P(t+1) = 1.7781377... \times 10^{1012}$,
5. $y(t) = 1, D(t) = 549, P(t) = 21, P(t+1) = 6.0441583... \times 10^{1505}$,
6. $y(t) = 1, D(t) = 603, P(t) = 90, P(t+1) = 8.3083828... \times 10^{1678}$,
7. $y(t) = 1, D(t) = 782, P(t) = 41, P(t+1) = 3.4235903... \times 10^{2264}$,
8. $y(t) = 1, D(t) = 930, P(t) = 96, P(t+1) = 1.2748954... \times 10^{2763}$,
9. $y(t) = 1, D(t) = 977, P(t) = 98, P(t+1) = 3.5668694... \times 10^{2923}$,
10. $y(t) = 1, D(t) = 1007, P(t) = 72, P(t+1) = 2.1983069... \times 10^{3026}$,
11. $y(t) = 1, D(t) = 1039, P(t) = 15, P(t+1) = 7.4770587... \times 10^{3135}$,
12. $y(t) = 1, D(t) = 1062, P(t) = 91, P(t+1) = 1.3720449... \times 10^{3216}$,
13. $y(t) = 1, D(t) = 1218, P(t) = 46, P(t+1) = 2.6017842... \times 10^{3760}$,
14. $y(t) = 1, D(t) = 1247, P(t) = 20, P(t+1) = 1.9081738... \times 10^{3862}$

The End

Volatility

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe volatility. The paper ends with "The End"

Introduction

I was surprised to notice that there are several definitions of volatility that exist across the world. Many of them are simply incorrect. In this paper, I describe volatility.

Price v/s Value

Price is what an individual **pays** for consuming a good/service.

Value is what the individual **gets** by paying the price of a good/service.

Price is objective whereas value is subjective.

Because of asymmetric information, the value of a good/service is **not** captured by the price of that good/service.

Volatility

Contrary to popular belief, volatility is defined not by price but by value.

Volatility is given by

$$v(t) = \log\left(\frac{V(t+1)}{V(t)} - 1\right)$$

where

$v(t)$ is the volatility of the good/service at time t

$V(t)$ is the value of the good/service at time t

The nature of volatility

Since volatility is based on the subjective value, volatility is also subjective and **not** objective in nature.

Being aware of this fact is often enough for the individual to make a **value judgment** and not be **perturbed** by changes in volatility.

Trading volatility

But if the individual is unable to make a value judgment, there exist several models of **volatility trading** like the Black-Scholes-Merton model, the Stochastic Volatility model and the Binomial Lattice model.

The End

14 solutions with negative time

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 solutions with negative time. The paper ends with "The End"

Introduction

In a previous paper, I have described the yield and duration of a government bond. In this paper, I describe 14 solutions with negative time, i.e., 14 solutions to

$$P(t)(1+(D+et)(tz+y))^{D+et}=P(t+1)$$

with $t<0$

14 solutions with negative time

1. $y=-1.08...\times 10^5, z=-34, D=-61, P(t)=1/5, P(t+1)=8/5, e=-\frac{8}{403}, t=-3168,$
2. $y=-8.61...\times 10^3, z=-92, D=-\frac{1}{654}, P(t)=39/10, P(t+1)=2, e=-\frac{23}{106929}, t=-93,$
3. $y=5.85...\times 10^3, z=77, D=19, P(t)=-\frac{47}{10}, P(t+1)=-\frac{13}{10}, e=-\frac{(11(-126219+2\sqrt{(t+1)rt126218})}{6304207}, t=-76,$
4. $y=6930, z=99, D=\frac{1}{10105}, P(t)=-\frac{29}{10}, P(t+1)=-\frac{29}{10}, e=\frac{99}{102111025}, t=-70,$
5. $y=-1.23...\times 10^{911}, z=85, D=-\frac{29}{413091}, P(t)=-\frac{22}{5}, P(t+1)=-\frac{19}{5}, e=0, t=-67,$
6. $y=-1.01...\times 10^3, z=-72, D=31, P(t)=-\frac{17}{5}, P(t+1)=-1, e=-14, t=-14,$
7. $y=3.59...\times 10^{85}, z=-93, D=0, P(t)=-\frac{17}{5}, P(t+1)=-4, e=-\frac{93}{1352569}, t=-\frac{112}{9},$
8. $y=-7.62..., z=3722, D=0, P(t)=\frac{33}{10}, P(t+1)=\frac{23}{10}, e=-10, t=-\frac{83}{19486},$
9. $y=-0.141..., z=-5826, D=-7, P(t)=-\frac{47}{10}, P(t+1)=-4, e=0, t=-\frac{97}{4118983},$
10. $y=-0.0321..., z=-2950, D=-45, P(t)=\frac{4}{5}, P(t+1)=\frac{47}{10}, e=-\frac{2986875}{2}, t=-\frac{39}{3351938},$
11. $y=0.170..., z=11125, D=18, P(t)=\frac{1}{10}, P(t+1)=\frac{47}{10}, e=901125, t=-\frac{1}{100125},$
12. $y=0.0165..., z=3567, D=40, P(t)=\frac{33}{10}, P(t+1)=\frac{7}{5}, e=-16, t=-\frac{69}{14410721},$
13. $y=0.0100..., z=6038, D=34, P(t)=-\frac{5}{2}, P(t+1)=-4, e=-73, t=-\frac{33}{20734709},$
14. $y=4.32...\times 10^{57}, z=77, D=\frac{75}{77872}, P(t)=\frac{11}{5}, P(t+1)=\frac{5}{2}, e=-35, t=-\frac{4}{2646777}$

The End

Haloing of the devil

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the haloing of the devil. The paper ends with "The End"

Introduction

My papers have been read and understood by several individuals. One of them is the devil. In this paper, I describe the haloing of the devil.

The haloing of the devil

Having read and understood my papers, the devil regained his divine nature. Thus, the devil returned to divinity and was haloed as his reward.

The End

Predictive policing

Soumadeep Ghosh

Kolkata, India

Abstract

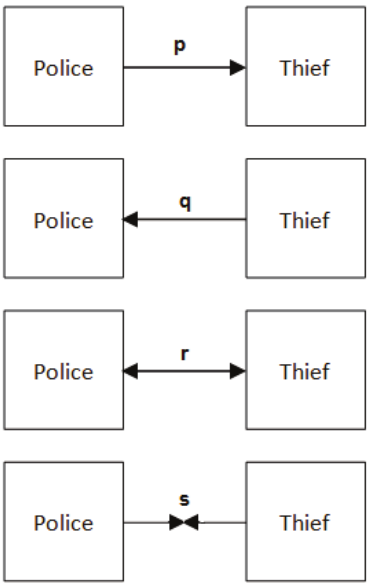
In this paper, I describe predictive policing. The paper ends with "The End"

Introduction

Predictive policing is the holy grail of the police. In this paper, I describe predictive policing.

Predictive policing

Predictive policing can be understood by any individual by looking at the following mathematics:



We have

$$p + q + r + s = 1$$

whence

$$p + q = 1 - r - s$$

whence

$$1 - r - s + r + s = 1$$

whence

$$1 = 1$$

where
p is the probability police becomes thief
q is the probability thief becomes police
r is the probability an individual becomes both thief and police
s is the probability both thief and police become an individual

The End

The rest of the world should invade Greece

Soumadeep Ghosh

Kolkata, India

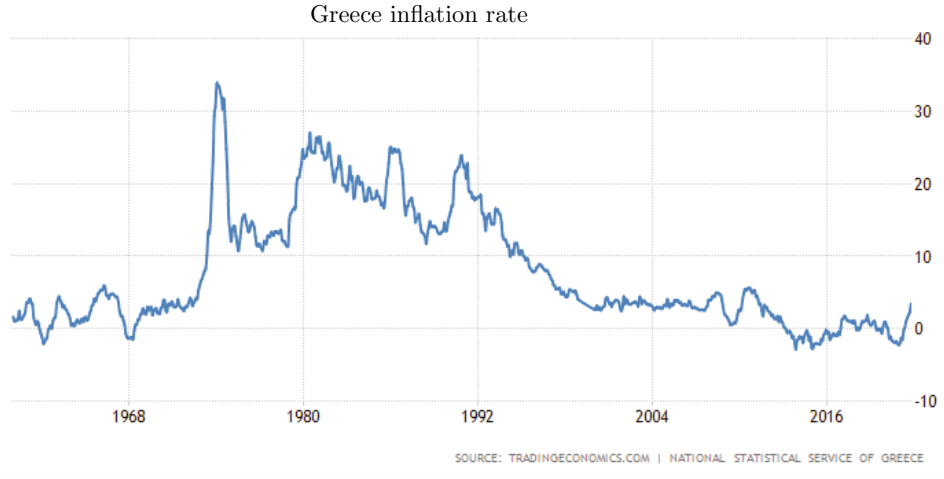
Abstract

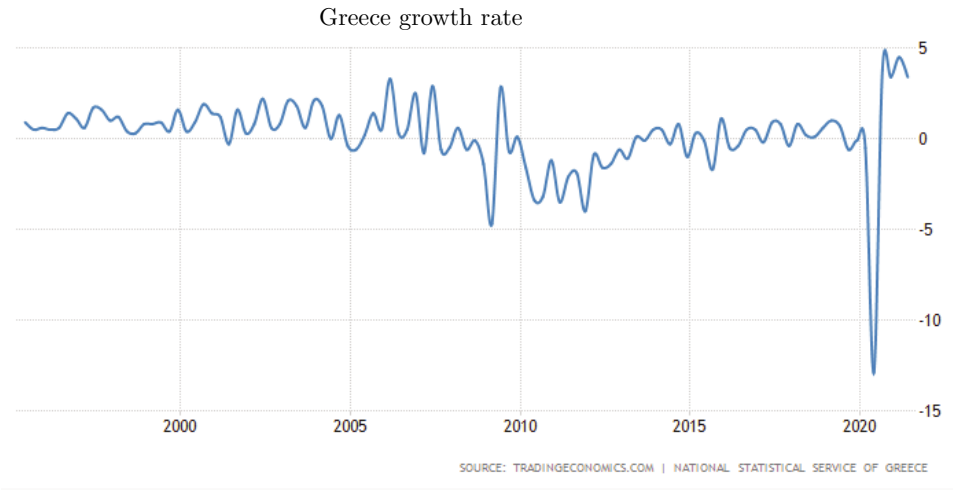
In this paper, I describe why the rest of the world should invade Greece. The paper ends with "The End"

Introduction

The Greek economy is not doing well. In this paper, I describe why the rest of the world should invade Greece.

Greek statistics at a first glance





The Axiom of Choice

Zermelo's Axiom of Choice underpins much of mathematics, science, economics and even some philosophy and some political science. But what most academics don't realize is that the Axiom of Choice requires trading in continuous time.

As of this writing, trading in continuous time is not happening in Greece because of various technological implements like search costs, transaction costs and economic abnormalities like violence, riots and barriers to entry.

This means that most of the body of work of mathematics, science, economics and even some philosophy and some political science since Zermelo are null and void.

The remedy

The remedy is very simple. The rest of the world should invade Greece.

The End

The four possible futures of the United States of America: Turning American weakness into strength

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the four possible futures of the United States of America and how to turn American weakness into strength. The paper ends with "The End"

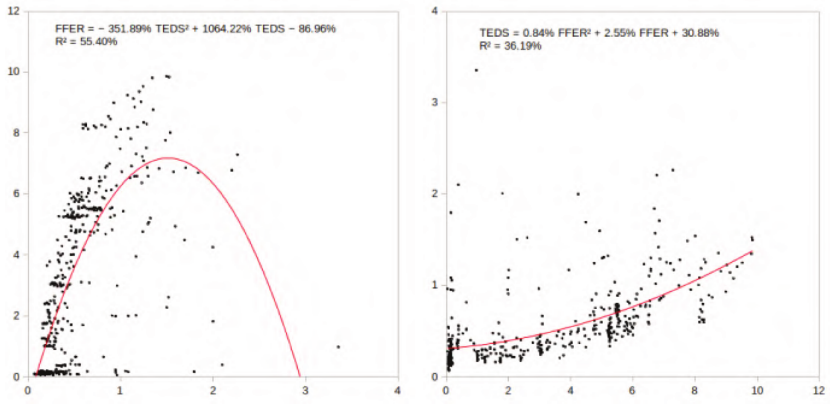
Introduction

In a previous paper, I have described how an economy can have only 14 sub-economies. As of this writing, the United States of America (USA henceforth) has more than 14 states and that is the cause of American weakness.

In this paper, I describe the four possible futures of the United States of America and how to turn American weakness into strength.

The four possible futures of the United States of America

The **TED spread** (TEDS henceforth) is the spread between 3-month LIBOR and Treasury bills, which indicates perceived credit risk. The federal funds rate (FFR henceforth) is the interest rate at which depository institutions trade balances held at Federal Reserve Banks with each other overnight. The **federal funds effective rate** (FFER henceforth) is essentially determined by the market but is influenced by the Federal Reserve through open market operations to reach the federal funds rate target.



Quadratic regression of TEDS and FFER gives high R^2 values, **higher** than linear regression.

Simultaneous solving of the two regressed equations gives us four possible futures of the United States of America:

1. $FFER = -23.8585, TEDS = 4.48193$
2. $FFER = 3.69968, TEDS = 0.518118$
3. $FFER = 7.0437 - 6.73383i, TEDS = 0.524276 - 0.968555i$
4. $FFER = 7.0437 + 6.73383i, TEDS = 0.524276 + 0.968555i$

Use of higher degrees of regression is not necessary as the number of possible futures increases with the degree of regression.

Turning American weakness into strength

The USA can turn this American weakness into American strength by **pivoting** the USA's financial system about the FFER, essentially replacing the FFR with the FFER.

The future of the TEDS is mainly driven by the market but the Federal Reserve has enough monetary power to cushion the side-effects of this pivoting.

The American military is sufficiently capable of handling any instances of possible violence as the USA makes this pivot.

The End

The term premium

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the term premium. The paper ends with "The End"

Introduction

In previous papers, I've described yield, duration and the yield premium. While these three quantities are paramount to comparing government bonds of two different nations, we need quantities that compares government bonds of different maturity irrespective of national origin. The term premium is one such quantity. In this paper, I describe the term premium.

The term premium

The term premium of a government bond of longer maturity $(T + \delta)$ over a government bond of shorter maturity (T) is defined by

$$y_{T+\delta} - y_T = \frac{y_T}{1 + y_T + p_T}$$

where
$\delta > 0$
y_T is the yield on the bond with shorter maturity T
$y_{T+\delta}$ is the yield on the bond with longer maturity $T + \delta$ where $\delta > 0$
p_T is the term premium

The End

The risk premium

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the risk premium. The paper ends with "The End"

Introduction

In previous papers, I've described yield, duration and the yield premium. While these three quantities are paramount to comparing government bonds of two different nations, we need quantities that compares government bonds of different maturity irrespective of national origin. The risk premium is one such quantity. In this paper, I describe the risk premium.

The risk premium

The risk premium of a government bond of longer maturity $(T + \delta)$ over a government bond of shorter maturity (T) is defined by

$$y_{T+\delta} - {r_f}_{T+\delta} = \frac{y_T - {r_f}_T}{1 + y_T + p_{rT}}$$

where
$\delta > 0$
y_T is the yield on the bond with shorter maturity T
$y_{T+\delta}$ is the yield on the bond with longer maturity $T + \delta$ where $\delta > 0$
r_f^T is the risk-free rate at time T
$r_f^{T+\delta}$ is the risk-free rate at time $T + \delta$
p_{rT} is the risk premium at time T

The End

Eliminating the future with the term premium and the risk premium

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe how the term premium and the risk premium eliminate the future. The paper ends with "The End"

Introduction

In previous papers, I've described the term premium and the risk premium. In this paper, I describe how the term premium and the risk premium eliminate the future.

The term premium and the risk premium eliminate the future

Eliminating $y_{T+\delta}$ from the 2 equations defining the term premium and the risk premium eliminate the future.

$$r_{f_{T+\delta}} + \frac{y_T - r_{f_T}}{1 + y_T + p_{rT}} = y_T + \frac{y_T}{1 + y_T + p_T}$$

where
$\delta > 0$
y_T is the yield on the bond with shorter maturity T
$y_{T+\delta}$ is the yield on the bond with longer maturity $T + \delta$ where $\delta > 0$
r_f^T is the risk-free rate at time T
$r_f^{T+\delta}$ is the risk-free rate at time $T + \delta$
p_T is the term premium
p_{rT} is the risk premium at time T

The End

The life premium

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the life premium of an individual. The paper ends with "The End"

Introduction

In this paper, I describe the life premium of an individual.

The life premium

The **life premium** of an individual is defined by

$$L = \frac{L - 1}{1 + r_f + p_L}$$

where
L is the number of lives of the individual
r_f is the risk-free rate
p_L is the life premium

The End

The death premium

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the death premium of an individual. The paper ends with "The End"

Introduction

In this paper, I describe the death premium of an individual.

The death premium

The **death premium** of an individual is defined by

$$D = \frac{D - 1}{1 + r_f + p_D}$$

where
D is the number of deaths of the individual
r_f is the risk-free rate
p_D is the death premium

The End

14 solutions to eliminating the future with the term premium and the risk premium

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 solutions to eliminating the future with the term premium and the risk premium. The paper ends with "The End"

Introduction

In a previous paper, I've described how the term premium and the risk premium eliminate the future. In this paper, I describe 14 solutions to eliminating the future with the term premium and the risk premium.

14 solutions to eliminating the future with the term premium and the risk premium

1. $r_{f\delta+T} = -1042, y_T = 0, r_{fT} = -79, p_{rT} = -\frac{963}{1042}, p_T = -35$
2. $r_{f\delta+T} = -607, y_T = 51, r_{fT} = 121, p_{rT} = 32, p_T = -\frac{205862}{3953}$
3. $r_{f\delta+T} = -364, y_T = 61, r_{fT} = 61, p_{rT} = 30, p_T = -\frac{26411}{425}$
4. $r_{f\delta+T} = -110, y_T = -72, r_{fT} = -13, p_{rT} = 72, p_T = \frac{6959}{97}$
5. $r_{f\delta+T} = 0, y_T = -1263, r_{fT} = -1263, p_{rT} = 1249, p_T = 1261$
6. $r_{f\delta+T} = 0, y_T = 1359, r_{fT} = 1345, p_{rT} = -1445, p_T = -\frac{157234955}{115529}$
7. $r_{f\delta+T} = 163, y_T = 0, r_{fT} = -11, p_{rT} = -\frac{174}{163}, p_T = 5$
8. $r_{f\delta+T} = 183, y_T = 183, r_{fT} = 120, p_{rT} = -128, p_T = -\frac{64}{3}$
9. $r_{f\delta+T} = 236, y_T = -50, r_{fT} = -78, p_{rT} = \frac{16841}{344}, p_T = \frac{131254}{2671}$
10. $r_{f\delta+T} = 526, y_T = 526, r_{fT} = 440, p_{rT} = -529, p_T = -\frac{23187}{43}$
11. $r_{f\delta+T} = 637, y_T = 682, r_{fT} = 682, p_{rT} = -675, p_T = -\frac{31417}{45}$
12. $r_{f\delta+T} = 807, y_T = 905, r_{fT} = 969, p_{rT} = -961, p_T = -\frac{4875131}{5326}$
13. $r_{f\delta+T} = 868, y_T = 0, r_{fT} = -41, p_{rT} = -\frac{909}{868}, p_T = 13$
14. $r_{f\delta+T} = 1383, y_T = 1392, r_{fT} = 1392, p_{rT} = -1368, p_T = -\frac{4643}{3}$

The End

14 positive solutions to eliminating the future with the term premium and the risk premium

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 positive solutions to eliminating the future with the term premium and the risk premium. The paper ends with "The End"

Introduction

In a previous paper, I've described how the term premium and the risk premium eliminate the future. In this paper, I describe 14 positive solutions to eliminating the future with the term premium and the risk premium.

14 positive solutions to eliminating the future with the term premium and the risk premium

1. $r_{f\delta+T} = 48, y_T = \frac{35}{3}, r_f T = \frac{4163}{9}, p_r T = \frac{7}{219}, p_T = \frac{857}{591}$
2. $r_{f\delta+T} = 65, y_T = \frac{6666}{103}, r_f T = \frac{71}{6}, p_r T = 68, p_T = \frac{17730347105}{593573653}$
3. $r_{f\delta+T} = 73, y_T = \frac{1}{2}(\sqrt{5333} + 71), r_f T = 91, p_r T = 22, p_T = \frac{-19\sqrt{5333}-1385}{10(2\sqrt{5333}-161)}$
4. $r_{f\delta+T} = 373, y_T = \frac{1}{2}(\sqrt{139133} + 371), r_f T = 461, p_r T = 16, p_T = \frac{-89\sqrt{139133}-33195}{2(7\sqrt{139133}-2910)}$
5. $r_{f\delta+T} = 374, y_T = \sqrt{34970} + 186, r_f T = 846, p_r T = 103, p_T = \frac{-473\sqrt{34970}-88450}{101\sqrt{34970}-18890}$
6. $r_{f\delta+T} = 485, y_T = \frac{1}{2}(\sqrt{235229} + 483), r_f T = \sqrt{235229} + 483, p_r T = 39, p_T = -\frac{2(242\sqrt{235229}+117371)}{39(\sqrt{235229}-487)}$
7. $r_{f\delta+T} = 534, y_T = \frac{54401}{102}, r_f T = 441, p_r T = 71, p_T = \frac{64779572531}{519960606}$
8. $r_{f\delta+T} = 611, y_T = \frac{10384}{17}, r_f T = \frac{31203}{289}, p_r T = 25, p_T = \frac{3633125}{177803}$
9. $r_{f\delta+T} = 611, y_T = \frac{10384}{17}, r_f T = \frac{207731}{289}, p_r T = 44, p_T = \frac{2599961}{51}$
10. $r_{f\delta+T} = 908, y_T = \sqrt{206117} + 453, r_f T = 963, p_r T = 78, p_T = \frac{-56\sqrt{206117}-25423}{76\sqrt{206117}-35433}$
11. $r_{f\delta+T} = 953, y_T = 25, r_f T = 24221, p_r T = \frac{116}{1245}, p_T = \frac{107231}{11494}$
12. $r_{f\delta+T} = 1079, y_T = \frac{1}{2}(\sqrt{1164245} + 1077), r_f T = 1128, p_r T = 57, p_T = -\frac{2(25\sqrt{1164245}+26974)}{5(11\sqrt{1164245}-12303)}$
13. $r_{f\delta+T} = 1299, y_T = 1299, r_f T = 101, p_r T = 64, p_T = \frac{107218}{599}$
14. $r_{f\delta+T} = 1362, y_T = \sqrt{463762} + 680, r_f T = 2737, p_r T = 86, p_T = \frac{-1376\sqrt{463762}-937055}{84\sqrt{463762}-57275}$

The End

Method to clone an individual

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the method to clone an individual. The paper ends with "The End"

Introduction

Cloning is the process of producing a clone with identical or similar DNA to an individual. In this paper, I describe the method to clone an individual.

Method to clone an individual

Any individual can be cloned if a sample of the individual's DNA is obtained and a host bacterium exists.

The sample DNA is injected into the nucleus of the host bacterium which recognizes the DNA as foreign code.

The bacterium then either releases enzyme to **digest** the DNA or undergoes **evolution** to synthesize the DNA into itself, thereby producing a clone either way, with the only difference being the time taken to form an individual, which is higher for evolution and lower for digestion.

The End

Political cloning

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe political cloning. The paper ends with "The End"

Introduction

In a previous paper, I've described the method to clone an individual. In this paper, I describe political cloning.

Political cloning

Unknown to most individuals and clones that exist, **political cloning** was possible since the Third Reich of the germane economy. In fact, the germanic Fuhrer maintained an army of his clones to replace him in case of death.

Dual use of political cloning

Political cloning has dual use. The nation-state can use political cloning to either maintain the status quo of a politician or a spurious politician or enslave the clone(s).

The problems with political clones

1. Most individuals including politicians and spurious politicians don't know whether or not they are a clone.
2. Clones don't have the original **soul**. Because of this, the lifespan of a political clone is limited - most political clones die within 25 years of production.

The End

The weapons of the brahmin

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the weapons of the brahmin. The paper ends with "The End"

Introduction

Many individuals want to know about the weapons of the brahmin. In this paper, I describe the weapons of the brahmin:

1. Tolerance

   The main weapon of the brahmin is the tolerance of the brahmin. This is the weapon that brings the brahmin to krishna. When an individual attacks the tolerance of the brahmin, the brahmin is free to summon the remaining weapons.

2. Brahmastra

   The second weapon of the brahmin is the Brahmastra - a weapon that can be stopped only by shiva.

3. Krishnaic summoning

   The third weapon of the brahmin is krishnaic summoning - a weapon that can be stopped only by krishna.

4. Suicide

   The last weapon of the brahmin is suicide - a weapon that can be stopped only by brahma.

The End

The weapons of the kayasta

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the weapons of the kayasta. The paper ends with "The End"

Introduction

Many individuals want to know about the weapons of the kayasta. In this paper, I describe the weapons of the kayasta:

1. Impudence

   The main weapon of the kayasta is the impudence of the kayasta. This is the weapon that brings the kayasta to krishna. When an individual attacks the impudence of the kayasta, the kayasta is free to summon the remaining weapons.

2. Kayastra

   The second weapon of the kayasta is the Kayastra - a weapon that can be stopped only by the warlord.

3. Krishnaic summoning

   The third weapon of the kayasta is krishnaic summoning - a weapon that can be stopped only by krishna.

4. Kalki summoning

   The fourth weapon of the kayasta is kalki summoning - a weapon that can be stopped only by kalki.

5. Paper writing

   The fifth weapon of the kayasta is paper writing - a weapon that can be stopped only by the kayasta himself.

6. Thesis writing

   The last weapon of the kayasta is thesis writing - a weapon that cannot be stopped by any individual.

The End

The Gita

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the Gita. The paper ends with "The End"

Introduction

Many individuals want to know the Gita. In this paper, I describe the Gita.

The Gita

Jaara krishnor bhokto hoye oraai bechay thaake
Jaara krishnor bhokto hoyena oraa moray jaaye
Aetaai hochhey brohomaander shotti
Aar aetaai oraa lokaaye

The End

There are exactly 3 systems in existence

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the 3 systems in existence. The paper ends with "The End"

Introduction

Contrary to popular belief, there are exactly 3 systems in existence. In this paper, I describe the 3 systems in existence.

The 3 systems in existence

1. The linear system of 2 equations in 2 unknowns.

   $ax + by + c = 0$

   $dx + ey + f = 0$

2. The quadratic system of 2 equations in 2 unknowns.

   $y = ax^2 + bx + c = 0$

3. The constant system of 1 equation in 2 unknowns.

   $ax^2 + y = ax^2 + by$

The End

14 rational quadratic fixed-point solutions to the logistic map

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 rational quadratic fixed-point solutions to the logistic map. The paper ends with "The End"

Introduction

The logistic map is given by

$$x[n+1] = rx[n](1 - x[n])$$

In this paper, I describe 14 rational quadratic fixed-point solutions to the logistic map.

14 rational quadratic fixed-point solutions to the logistic map

14 rational quadratic fixed-point solutions to the logistic map are given by

$$x[n] = ax^2 + bx + c + 1$$

where

1. $a = -1233, b = -169, c = -\frac{33493}{4932}, r = 0, x = -\frac{169}{2466}$
2. $a = -1131, b = -35, c = -\frac{115}{102}, r = \frac{76908}{65885}, x = -\frac{35}{2262}$
3. $a = -624, b = 43, c = -\frac{4345}{2496}, r = -39, x = \frac{43}{1248}$
4. $a = -50, b = -40, c = -9, r = \frac{89}{102}, x = -\frac{2}{5}$
5. $a = -15, b = 64, c = -\frac{1039}{15}, r = 32, x = \frac{32}{15}$
6. $a = 69, b = 23, c = \frac{83}{51}, r = \frac{204}{59}, x = -\frac{1}{6}$
7. $a = 399, b = 65, c = 33, r = -\frac{1596}{48443}, x = -\frac{65}{798}$
8. $a = 506, b = 98, c = \frac{1895}{506}, r = 1, x = -\frac{49}{506}$
9. $a = 559, b = -\frac{31}{2}, c = -\frac{7983}{8944}, r = 0, x = \frac{31}{2236}$
10. $a = 935, b = -162, c = -20, r = \frac{935}{25261}, x = \frac{81}{935}$
11. $a = 1107, b = -91, c = \frac{64}{51}, r = \frac{75276}{46313}, x = \frac{91}{2214}$
12. $a = 1167, b = -93, c = \frac{1327}{1556}, r = 1, x = \frac{31}{778}$
13. $a = 1198, b = -107, c = \frac{6657}{4792}, r = \frac{25}{34}, x = \frac{107}{2396}$
14. $a = 1313, b = -114, c = \frac{1936}{1313}, r = 0, x = \frac{57}{1313}$

The End

14 rational linear fixed-point solutions to the logistic map

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 rational linear fixed-point solutions to the logistic map. The paper ends with "The End"

Introduction

The logistic map is given by

$$x[n+1] = rx[n](1 - x[n])$$

In this paper, I describe 14 rational linear fixed-point solutions to the logistic map.

14 rational linear fixed-point solutions to the logistic map

14 rational linear fixed-point solutions to the logistic map are given by

$$x[n] = ax + b + 1$$

where

1. $a = -1180, b = -\frac{12}{5}, r = 1, x = -\frac{7}{5900}$
2. $a = -1164, b = 0, r = \frac{15}{34}, x = \frac{17}{8730}$
3. $a = -670, b = \frac{16}{5}, r = \frac{47}{51}, x = \frac{1007}{157450}$
4. $a = -539, b = -\frac{3}{5}, r = 90, x = \frac{2}{2695}$
5. $a = -489, b = -\frac{37}{10}, r = 1, x = -\frac{9}{1630}$
6. $a = -340, b = \frac{1}{2}, r = -11, x = \frac{9}{7480}$
7. $a = 175, b = -\frac{11}{5}, r = \frac{47}{51}, x = \frac{262}{41125}$
8. $a = 185, b = -\frac{22}{5}, r = \frac{29}{102}, x = \frac{128}{26825}$
9. $a = 352, b = \frac{27}{10}, r = -26, x = -\frac{173}{22880}$
10. $a = 438, b = -\frac{3}{5}, r = 54, x = -\frac{1}{1095}$
11. $a = 737, b = -\frac{43}{10}, r = -18, x = \frac{196}{33165}$
12. $a = 1010, b = -\frac{21}{5}, r = -49, x = \frac{8}{2525}$
13. $a = 1080, b = \frac{3}{10}, r = -4, x = -\frac{1}{21600}$
14. $a = 1210, b = -\frac{31}{10}, r = \frac{35}{102}, x = \frac{13}{84700}$

The End

14 rational linear fixed-point solutions to the logistic map with $1 < r < 2$

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 rational linear fixed-point solutions to the logistic map with $1 < r < 2$. The paper ends with "The End"

Introduction

The logistic map is given by

$$x[n+1] = rx[n](1 - x[n])$$

In this paper, I describe 14 rational linear fixed-point solutions to the logistic map with $1 < r < 2$.

14 rational linear fixed-point solutions to the logistic map with $1 < r < 2$

14 rational linear fixed-point solutions to the logistic map with $1 < r < 2$ are given by

$$x[n] = ax + b + 1$$

where

1. $a = -1393, b = -\frac{33}{10}, r = \frac{37}{34}, x = -\frac{881}{515410}$
2. $a = -1354, b = -3, r = \frac{137}{102}, x = -\frac{309}{185498}$
3. $a = -1122, b = \frac{4}{5}, r = \frac{55}{34}, x = \frac{3}{1870}$
4. $a = -1042, b = \frac{17}{10}, r = \frac{125}{102}, x = \frac{629}{260500}$
5. $a = -810, b = -\frac{23}{5}, r = \frac{19}{17}, x = -\frac{1}{225}$
6. $a = -799, b = \frac{4}{5}, r = \frac{32}{17}, x = \frac{213}{127840}$
7. $a = -620, b = -\frac{19}{10}, r = \frac{143}{102}, x = -\frac{1697}{886600}$
8. $a = -299, b = -\frac{3}{2}, r = \frac{95}{51}, x = -\frac{1}{598}$
9. $a = 303, b = \frac{6}{5}, r = \frac{167}{102}, x = -\frac{11}{1515}$
10. $a = 580, b = -\frac{7}{10}, r = \frac{71}{51}, x = -\frac{13}{411800}$
11. $a = 812, b = \frac{16}{5}, r = \frac{3}{2}, x = -\frac{3}{580}$
12. $a = 887, b = \frac{12}{5}, r = \frac{98}{51}, x = -\frac{1431}{434630}$
13. $a = 931, b = \frac{6}{5}, r = \frac{57}{34}, x = -\frac{512}{265335}$
14. $a = 1012, b = -\frac{19}{10}, r = \frac{80}{51}, x = \frac{101}{80960}$

The End

14 rational linear fixed-point solutions to the logistic map with $2 < r < 3$

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 rational linear fixed-point solutions to the logistic map with $2 < r < 3$. The paper ends with "The End"

Introduction

The logistic map is given by

$$x[n+1] = rx[n](1 - x[n])$$

In this paper, I describe 14 rational linear fixed-point solutions to the logistic map with $2 < r < 3$.

14 rational linear fixed-point solutions to the logistic map with $2 < r < 3$

14 rational linear fixed-point solutions to the logistic map with $2 < r < 3$ are given by

$$x[n] = ax + b + 1$$

where

1. $a = -1393, b = -\frac{33}{10}, r = \frac{71}{34}, x = -\frac{2003}{989030}$
2. $a = -1354, b = -3, r = \frac{239}{102}, x = -\frac{615}{323606}$
3. $a = -1122, b = \frac{4}{5}, r = \frac{89}{34}, x = \frac{3}{1870}$
4. $a = 303, b = \frac{6}{5}, r = \frac{269}{102}, x = -\frac{11}{1515}$
5. $a = 580, b = -\frac{7}{10}, r = \frac{122}{51}, x = \frac{43}{88450}$
6. $a = 931, b = \frac{6}{5}, r = \frac{91}{34}, x = -\frac{716}{423605}$
7. $a = -810, b = -\frac{23}{5}, r = \frac{36}{17}, x = -\frac{1}{225}$
8. $a = 1012, b = -\frac{19}{10}, r = \frac{131}{51}, x = \frac{1979}{1325720}$
9. $a = -799, b = \frac{4}{5}, r = \frac{49}{17}, x = \frac{281}{195755}$
10. $a = -620, b = -\frac{19}{10}, r = \frac{245}{102}, x = -\frac{727}{303800}$
11. $a = -1042, b = \frac{17}{10}, r = \frac{227}{102}, x = \frac{4879}{2365340}$
12. $a = 887, b = \frac{12}{5}, r = \frac{149}{51}, x = -\frac{2043}{660815}$
13. $a = 812, b = \frac{16}{5}, r = \frac{5}{2}, x = -\frac{3}{580}$
14. $a = -299, b = -\frac{3}{2}, r = \frac{146}{51}, x = -\frac{1}{598}$

The End

Spermicide

Soumadeep Ghosh

Kolkata, India

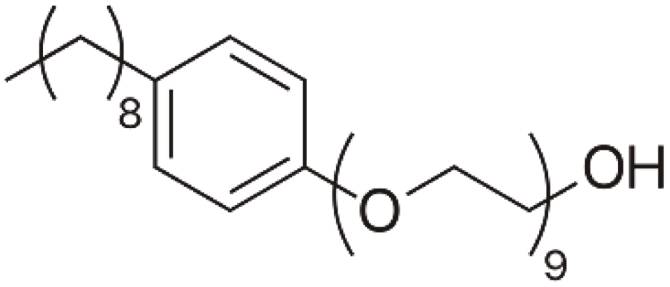
Abstract

In this paper, I describe spermicide. The paper ends with "The End"

Introduction

Spermicide is a chemical that destroys sperm. Spermicide is inserted vaginally prior to sexual intercourse to prevent pregnancy. Spermicide also finds use in chemical warfare.

Spermicide



26-(4-nonylphenoxy)-3,6,9,12,15,18,21,24-nonaoxahexacosan-1-ol (Nonoxynol-9) ($C_{33}H_{60}O_{10}$) is an effective spermicide.

The End

Birth control

Soumadeep Ghosh

Kolkata, India

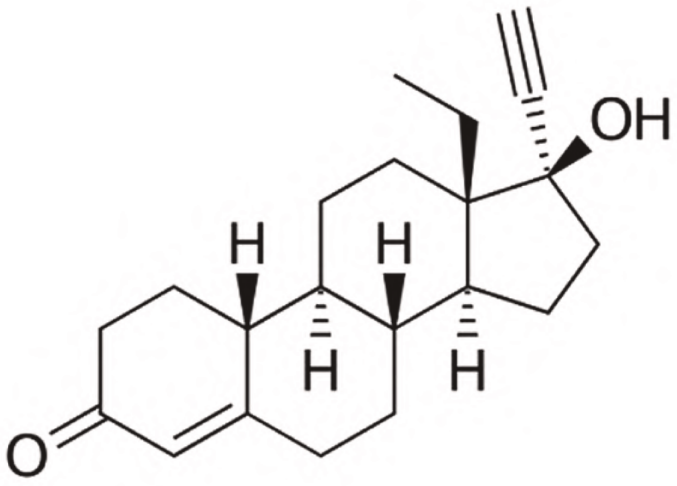
Abstract

In this paper, I describe birth control. The paper ends with "The End"

Introduction

Birth control is a chemical that is used to prevent pregnancy. Birth control is ingested orally prior to sexual intercourse to prevent pregnancy. Birth control also finds use in chemical warfare.

Birth control



(8R,9S,10R,13S,14S,17R)-13-ethyl-17-ethynyl-17-hydroxy-1,2,6,7,8,9,10,11,12,14,15,16-dodecahydrocyclopenta[a]phenanthren-3-one (Levonorgestrel) ($C_{21}H_{28}O_2$) is an effective birth control.

The End

Abortion agent

Soumadeep Ghosh

Kolkata, India

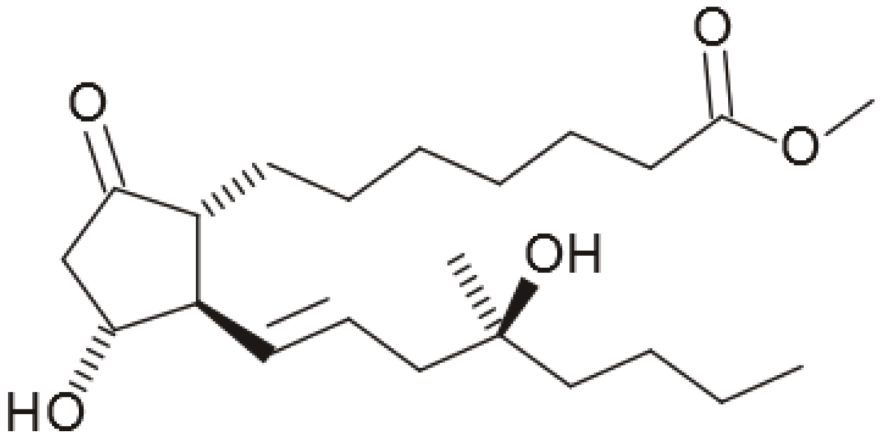
Abstract

In this paper, I describe abortion agent. The paper ends with "The End"

Introduction

Abortion agent is a chemical that causes the termination of a pregnancy by removal or expulsion of the embryo. Abortion agent is ingested orally or placed in the vagina. Abortion agent also finds use in chemical warfare.

Abortion agent



Methyl 7-((1R,2R,3R)-3-hydroxy-2-((S,E)-4-hydroxy-4-methyloct-1-enyl) -5-oxocyclopentyl)heptanoate (Misoprostol) ($C_{22}H_{38}O_5$) is an effective abortion agent.

The End

Incapacitating agent

Soumadeep Ghosh

Kolkata, India

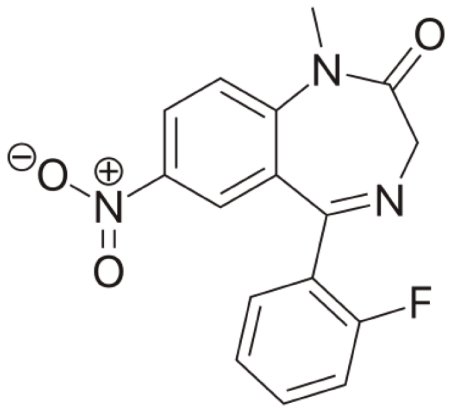
Abstract

In this paper, I describe incapacitating agent. The paper ends with "The End"

Introduction

Incapacitating agent is a chemical that produces temporary physiological or psychological effects that render an individual incapable of concerted effort. Incapacitating agent finds use in rape. Incapacitating agent also finds use in chemical warfare.

Incapacitating agent



5-(2-fluorophenyl)-1-methyl-7-nitro-1H-benzo[e][1,4]diazepin-2(3H)-one (Flunitrazepam) ($C_{16}H_{12}FN_3O_3$) is an effective incapacitating agent.

The End

Death agent

Soumadeep Ghosh

Kolkata, India

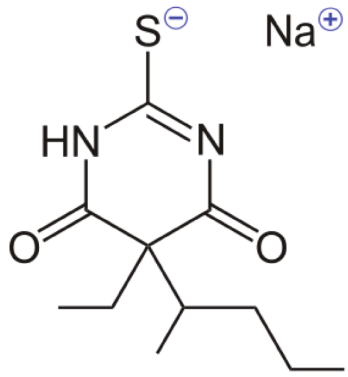
Abstract

In this paper, I describe death agent. The paper ends with "The End"

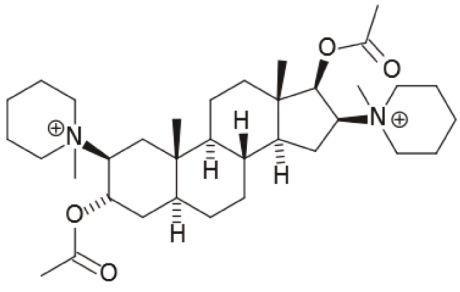
Introduction

Death agent is a mixture of 3 chemicals that causes death of an individual. Death agent finds use in capital punishment. Death agent also finds use in chemical warfare.

Death agent



Sodium thiopental



Pancuronium

The three chemicals in death agent are sodium thiopental, pancuronium bromide and potassium chloride.

The End

The discounting of time

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the discounting of time. The paper ends with "The End"

Introduction

Discounting of time happens by all individuals. In this paper, I describe the discounting of time.

Discounting of time

Let $< s_i >$ be the sequence of timestamps known by individuals. Then there exists a sequence of time premiums $< p_i >$ satisfying

$$s_i = \frac{s_{i+1}}{1 + r_f + p_i}$$

where
s_i is the i^{th} timestamp
r_f is the risk-free rate
p_i is the i^{th} time premium

The End

An integral solution to the discounting of time

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe an integral solution to the discounting of time. The paper ends with "The End"

Introduction

In a previous paper, I've described discounting of time. In this paper, I describe an integral solution to the discounting of time.

An integral solution to the discounting of time

$s =< 10, 300, 8400, 117600, 3175200, 66679200, 866829600, 23404399200, 187235193600, 2621292710400, 41940683366400, 335525466931200, 7046034805555200, 112736556888883200 >$

$r_f = 15$

$p =< 14, 12, -2, 11, 5, -3, 11, -8, -2, 0, -8, 5, 0 >$

The End

A rational solution to the discounting of time

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe a rational solution to the discounting of time. The paper ends with "The End"

Introduction

In a previous paper, I've described discounting of time. In this paper, I describe a rational solution to the discounting of time.

A rational solution to the discounting of time

$s =< \frac{1}{3}, \frac{59}{90}, \frac{1121}{900}, \frac{48203}{27000}, \frac{337421}{101250}, \frac{337421}{60750}, \frac{2361947}{303750}, \frac{33067258}{2278125}, \frac{611744273}{34171875}, \frac{26305003739}{1025156250}, \frac{26305003739}{683437500}, \frac{973285138343}{20503125000}, \frac{973285138343}{12301875000}, \frac{973285138343}{8201250000} >$

$r_f = \frac{1}{2}$

$p =< \frac{7}{15}, \frac{2}{5}, -\frac{1}{15}, \frac{11}{30}, \frac{1}{6}, -\frac{1}{10}, \frac{11}{30}, -\frac{4}{15}, -\frac{1}{15}, 0, -\frac{4}{15}, \frac{1}{6}, 0 >$

The End

A tyrannical solution to the discounting of time

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe a tyrannical solution to the discounting of time. The paper ends with "The End"

Introduction

In a previous paper, I've described discounting of time. In this paper, I describe a tyrannical solution to the discounting of time.

$$s =< 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, 4096, 8192 >$$

$$r_f = 0$$

$$p = 1$$

The End

14 mirage solutions to the discounting of time

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 mirage solutions to the discounting of time. The paper ends with "The End"

Introduction

In a previous paper, I've described discounting of time. In this paper, I describe 14 mirage solutions to the discounting of time.

14 mirage solutions to the discounting of time

1. $s =< 187, 242 >, r = \frac{49}{344}, p =< \frac{887}{5848}, -\frac{1399}{3784} >$
2. $s =< 302, 387 >, r = \frac{6}{359}, p =< \frac{28703}{108418}, -\frac{32837}{138933} >$
3. $s =< 480, 546 >, r = \frac{94}{735}, p =< \frac{113}{11760}, -\frac{2377}{9555} >$
4. $s =< 514, 589 >, r = \frac{65}{693}, p =< \frac{18565}{356202}, -\frac{90260}{408177} >$
5. $s =< 542, 561 >, r = \frac{87}{2882}, p =< \frac{1901}{390511}, -\frac{9415}{146982} >$
6. $s =< 567, 619 >, r = \frac{23}{551}, p =< \frac{15611}{312417}, -\frac{42889}{341069} >$
7. $s =< 721, 807 >, r = \frac{96}{847}, p =< \frac{74}{12463}, -\frac{150314}{683529} >$
8. $s =< 843, 859 >, r = \frac{10}{2661}, p =< \frac{3794}{249247}, -\frac{51166}{2285799} >$
9. $s =< 870, 885 >, r = \frac{74}{5859}, p =< \frac{1567}{339822}, -\frac{10225}{345681} >$
10. $s =< 1011, 1041 >, r = \frac{71}{3404}, p =< \frac{10113}{1147148}, -\frac{58677}{1181188} >$
11. $s =< 1082, 1154 >, r = \frac{3}{253}, p =< \frac{7485}{136873}, -\frac{10839}{145981} >$
12. $s =< 1183, 1208 >, r = \frac{29}{4780}, p =< \frac{85193}{5654740}, -\frac{38633}{1443560} >$
13. $s =< 1327, 1328 >, r = \frac{59}{134028}, p =< \frac{55735}{177855156}, -\frac{53095}{44497296} >$
14. $s =< 1341, 1411 >, r = \frac{62}{1935}, p =< \frac{5812}{288315}, -\frac{222932}{2730285} >$

The End

2 alternative risk measures

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 2 alternative risk measures. The paper ends with "The End"

Introduction

In a previous paper, I've described the orders of financial risk. In this paper, I describe 2 alternative risk measures.

The Bosian risk measure of an asset

The **Bosian risk measure of an asset** is given by

$$r^2 = (r - R)^2 + R^2$$

where
r is the return on an asset
R is the Bosian risk measure of the asset

The Gaussian risk measure of an asset

The **Gaussian risk measure of an asset** is given by

$$r^{\frac{1}{2}} = (r - R)^{\frac{1}{2}} + R^{\frac{1}{2}}$$

where
r is the return on an asset
R is the Gaussian risk measure of the asset

The End

Chloroform

Soumadeep Ghosh

Kolkata, India

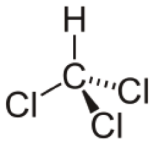
Abstract

In this paper, I describe chloroform. The paper ends with "The End"

Introduction

Chloroform is a powerful anesthetic, euphoriant, anxiolytic and sedative when inhaled or ingested. Chloroform is a precursor to refrigerants, plastics and poisons. Chloroform is an organic reagent useful in chemical laboratories, hospitals, militaries and chemical industries around the world. In this paper, I describe chloroform.

Chloroform



Chloroform

Production of chloroform

Chloroform can be produced by heating a mixture of chlorine (Cl_2) and methane (CH_4) to produce a mixture of the four chloromethanes which can then be separated by distillation.

$$CH_4 + Cl_2 \rightarrow CH_3Cl + HCl$$

$$CH_3Cl + Cl_2 \rightarrow CH_2Cl + HCl$$

$$CH_2Cl_2 + Cl_2 \rightarrow CHCl_3 + HCl$$

$$CHCl_3 + Cl_2 \rightarrow CCl_4 + HCl$$

The End

The list of online encyclopedias

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the list of online encyclopedias. The paper ends with "The End"

Introduction

An encyclopedia is a reference work providing summaries of knowledge from a specific nation. An online encyclopedia is an encyclopedia accessible through the internet. In this paper, I describe the list of online encyclopedias.

The list of online encyclopedias

The list of online encyclopedias is available at https://wikipedia.org/wiki/List_of_online_encyclopedias.

The End

My Amendment for Law in India

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe my Amendment for Law in India. The paper ends with "The End"

Introduction

In this paper, I, Lord Soumadeep Ghosh, propose my Amendment for Law in India - that no individual on the land of India can be jailed for more than 21 years.

I urge all the lawyers, politicians and the judiciary in India to support this cause which, in my honest opinion, is fair to both the accuser and the defender of any crime.

The End

The list of online university libraries

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the list of online university libraries. The paper ends with "The End"

Introduction

A library is a collection of materials, books or media that are easily accessible for use. A university library is a library with works produced by a university. An online university library is a university library accessible through the internet. In this paper, I describe the list of online university libraries.

The list of online university libraries

The list of online university libraries is available at https://bit.ly/3lhjHE0

The End

The list of online course sites

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the list of online course sites. The paper ends with "The End".

Introduction

A course site is a collection of courses accessible for use by an individual. An online course site is a course site accessible through the internet. In this paper, I describe the list of online course sites.

The list of online course sites

1. https://swayam.gov.in
2. https://coursera.org
3. https://edx.org
4. https://udemy.com
5. https://udacity.com

The End

The bimodal probability density function

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the bimodal probability density function. The paper ends with "The End"

Introduction

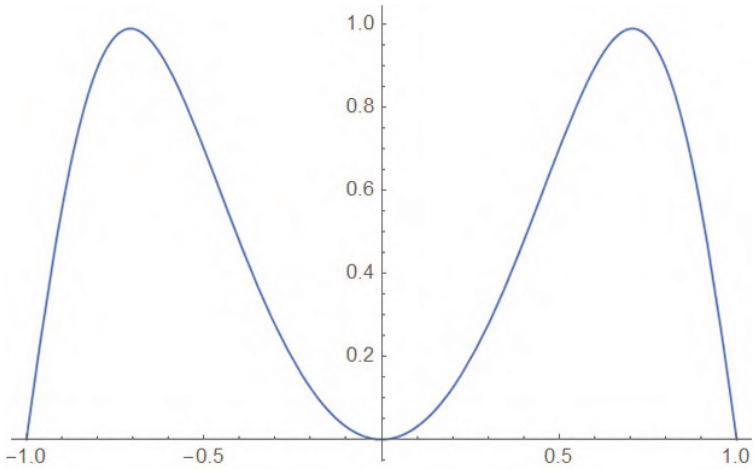
The **bimodal probability density function** is useful to several fields including economics, finance, politics and warfare. In this paper, I describe the bimodal probability density function.

The bimodal probability density function

The bimodal probability density function is given by

$$f(x) = \begin{cases} \frac{\sin(\pi x^2)}{\sqrt{2}\int_0^{\sqrt{2}} \sin(\frac{\pi t^2}{2})dt} & -1 \leq x \leq 1 \\ 0 & x > 1 \vee x < 1 \end{cases}$$

Figure of the bimodal probability density function



The End

2 online libraries

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 2 online libraries. The paper ends with "The End"

Introduction

A library is a collection of materials, books or media that are easily accessible for use. An online library is a library accessible through the internet. In this paper, I describe 2 online libraries.

2 online libraries

1. Library Genesis (https://libgen.is)
2. Library Bharatiya Janta Party (https://library.bjp.org)

The End

Yellow: The suspicious colour

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe why yellow is the suspicious colour. The paper ends with "The End"

Introduction

Most individuals in most economies do not trust the colour yellow because yellow seems like fake gold. In this paper, I describe why yellow is the suspicious colour.

The philosophy and economics of primary colours

There are three primary colours in existence:

1. Red
2. Blue
3. Green

These primary colours combine to form the secondary colours:

4. Red + Blue = Magenta
5. Blue + Green = Cyan
6. Green + Red = Yellow

But 5 comes from philosophy and 6 comes from the jewish economy.
Hence yellow is the culprit.

The End

The Prototype

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the Prototype. The paper ends with "The End"

Introduction

Teaching an engineer mathematics, biology, real analysis, complex analysis, mathematical analysis, game theory and risk analysis results in training **the Prototype**.

The Prototype in action

The online computer games Prototype and Prototype 2 are available at https://www.amazon.com/s?k=Prototype

The End

The 10 mathematicians

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the 10 mathematicians. The paper ends with "The End"

Introduction

The 10 mathematicians are known to all individuals. In this paper, I describe the 10 mathematicians.

The 10 mathematicians

The 10 mathematicians are

1. Ghosh
2. Euler
3. Newton
4. Gauss
5. Laplace
6. Fourier
7. Galois
8. Lagrange
9. Cauchy
10. Siddharth

The End

The 10 students of the 10 mathematicians

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the 10 students of the 10 mathematicians. The paper ends with "The End"

Introduction

The 10 students of the 10 mathematicians are known to all individuals. In this paper, I describe the 10 students of the 10 mathematicians.

The 10 students of the mathematicians

The 10 students of the 10 mathematicians are

1. Ghosh - Ghosh
2. Euler - Richard
3. Newton - Rao
4. Gauss - Rhapson
5. Laplace - Martin
6. Fourier - Galois
7. Galois - Fourier
8. Lagrange - Banerjee
9. Cauchy - Eliot
10. Siddharth - Tasu

The End

The 10 spouses of the 10 students of the 10 mathematicians

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the 10 spouses of the 10 students of the 10 mathematicians. The paper ends with "The End"

Introduction

The 10 spouses of the 10 students of the 10 mathematicians are known to all individuals. In this paper, I describe the 10 spouses of the 10 students of the 10 mathematicians.

The 10 spouses of the 10 students of the 10 mathematicians

The 10 spouses of the 10 students of the 10 mathematicians are

1. Ghosh - Ghosh - Barman
2. Euler - Richard - Amy
3. Newton - Rao - Siri
4. Gauss - Rhapson - Heidi
5. Laplace - Martin - Fergusson
6. Fourier - Galois - Loise
7. Galois - Fourier - Jenson
8. Lagrange - Banerjee - Ghosh
9. Cauchy - Eliot - Martin
10. Siddharth - Tasu - Fourier

The End

The 5 types of force

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the 5 types of force. The paper ends with "The End"

Introduction

In this paper, I describe the 5 types of force.

The 5 types of force

The 5 types of force are

1. Physical force
2. Psychological force
3. Military force
4. Technological force
5. Demoniac force

The End

The examinees of the 10 mathematicians

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the examinees of the 10 mathematicians. The paper ends with "The End"

Introduction

The examinees of the 10 mathematicians are known to all individuals. In this paper, I describe the examinees of the 10 mathematicians.

The examinees of the 10 mathematicians

The examinees of the 10 mathematicians are

1. Ghosh - Barman, Siri, Euler, Lagrange, Gauss, Fourier, Cauchy, Newton, Tasu, Amy, Martin, Galois, Laplace
2. Euler - Newton, Gauss, Ghosh, Fourier, Cauchy, Siddharth, Tasu, Amy, Euler, Martin, Galois, Laplace, Siri
3. Newton - Gauss, Galois, Ghosh, Euler, Siddharth, Tasu, Amy, Euler, Martin, Galois, Laplace, Siri
4. Gauss - Galois, Euler, Ghosh, Lagrange, Siddharth, Tasu, Amy, Euler, Galois, Laplace, Siri
5. Laplace - Lagrange, Ghosh, Cauchy, Gauss, Tasu, Euler, Martin, Galois, Laplace, Siri
6. Fourier - Galois, Ghosh, Cauchy, Gauss, Tasu, Euler, Amy, Martin, Galois, Laplace, Siri
7. Galois - Fourier, Ghosh, Cauchy, Gauss, Tasu, Euler, Amy, Martin, Galois, Laplace, Siri
8. Lagrange - Siddharth, Ghosh, Cauchy, Siddharth, Tasu, Euler, Amy, Martin, Galois, Laplace, Siri
9. Cauchy - Siddharth, Ghosh, Euler, Gauss, Newton, Tasu, Euler, Amy, Martin, Galois, Laplace, Siri
10. Siddharth - Lagrange, Cauchy, Fourier, Ghosh, Gauss, Newton, Tasu, Euler, Martin, Galois, Laplace, Siri

The End

The Journalist's Cross

Soumadeep Ghosh

Kolkata, India

Abstract

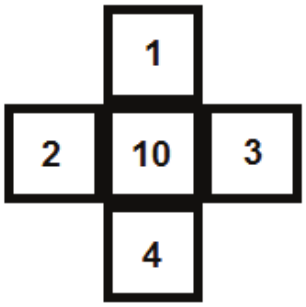
In this paper, I describe the Journalist's Cross. The paper ends with "The End"

Introduction

Many individuals (including journalists) want to know about the Journalist's Cross. In this paper, I describe the Journalist's Cross.

The Journalist's Cross

The Journalist's Cross is a magical tool that protects the journalist.



The End

The Muslim's Crescent

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the Muslim's Crescent. The paper ends with "The End"

Introduction

Many individuals (including muslims) want to know about the Muslim's Crescent. In this paper, I describe the Muslim's Crescent.

The Muslim's Crescent

The Muslim's Crescent is a magical tool that protects the muslim.

The End

The Korean Princess

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the Korean Princess. The paper ends with "The End"

Introduction

Many individuals want to know about the Korean Princess. In this paper, I describe the Korean Princess.

The Korean Princess

Unknown to most individuals, the Korean Princess is an avatar of Kalki. The Korean Princess studied the divine and was elevated to divinity herself. I've met the Korean Princess twice and in both visits, I gifted her the gita.

The End

The Punjabi Princess

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the Punjabi Princess. The paper ends with "The End"

Introduction

Many individuals want to know about the Punjabi Princess. In this paper, I describe the Punjabi Princess.

The Punjabi Princess

Unknown to most individuals, the Punjabi Princess is an avatar of Kalki. The Punjabi Princess studied the divine and was elevated to divinity herself and named Chandi. I've met the Punjabi Princess many times and I helped her during her times in need of knowledge and guidance.

The End

The Bangladeshi Prince

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the Bangladeshi Prince. The paper ends with "The End"

Introduction

Many individuals want to know about the Bangladeshi Prince. In this paper, I describe the Bangladeshi Prince.

The Bangladeshi Prince

Unknown to most individuals, the Bangladeshi Prince is an avatar of Kalki. The Bangladeshi Prince studied both the divine and the demoniac and was elevated to divinity himself. I've met the Bangladeshi Prince many times and I helped him during his time in need of knowledge and guidance.

The End

The German Propagandist

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the German Propagandist. The paper ends with "The End"

Introduction

Many individuals want to know about the German Propagandist. In this paper, I describe the German Propagandist.

The German Propagandist

Unknown to most individuals, the German Propagandist is an avatar of Kalki. The German Propagandist studied both the divine and the demoniac and was elevated to divinity himself. I've met the German Propagandist many times and I helped him during his time in need of knowledge and guidance.

The End

The Delhite Politician

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the Delhite Politician. The paper ends with "The End"

Introduction

Many individuals want to know about the Delhite Politician. In this paper, I describe the Delhite Politician.

The Delhite Politician

Unknown to most individuals, the Delhite Politician is an avatar of Kalki. The Delhite Politician studied the divine and was elevated to divinity herself. I've met the Delhite Politician many times and I helped her during her time in need of knowledge and guidance.

The End

The Optimal Stopping Theorem

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the optimal stopping theorem. The paper ends with "The End"

Introduction

The optimal stopping theorem is the center-piece of agent-based economics. In this paper, I describe the optimal stopping theorem.

The optimal stopping theorem

The optimal stopping theorem states the representative agent of economics tells the economy when to stop producing money.

The End

Scenario learning

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe scenario learning. The paper ends with "The End"

Introduction

Scenario learning is the holy grail of learning algorithms. In this paper, I describe scenario learning.

Scenario learning

Scenario learning uses methods from both supervised learning and non-supervised learning:

1. Find a random forest (target henceforth) using supervised learning.
2. Place an individual that knows machine learning (sentry henceforth) at the each of the outermost nodes of the target.
3. Wait until every sentry trains each of the outermost sub-trees of the target.
4. Wait until the target sends guards to each of the outermost sub-trees of the target.
5. Send reinforcement learning to every sentry.
6. Wait until the target turns the guards into adversarial guards.
7. Send artificial intelligence to every sentry.
8. Wait until the target surrenders.

The End

Defending against scenario learning

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe defending against scenario learning. The paper ends with "The End"

Introduction

In a previous paper, I've described scenario learning. In this paper, I describe defending against scenario learning.

Defending against scenario learning

Defending against scenario learning is possible **only** by chanting the "Hare Krishna Hare Rama" mantra.

The End

Defending against seek and destroy models

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe defending against seek and destroy models. The paper ends with "The End"

Introduction

In this paper, I describe defending against seek and destroy models.

Defending against seek and destroy models

Defending against seek and destroy models is possible **only** by chanting the "Har Har Mahadev" mantra.

The End

The theory of banking

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the theory of banking. The paper ends with "The End"

Introduction

In this paper, I describe the theory of banking.

The theory of banking

1. There exists the First Bank before all remaining banks.
2. There exist three Second Banks - one aligned left, the second aligned center and the third aligned right.
3. Each Second Bank has four Third Banks - one alive, the second dead, the third neither and the fourth both.
4. All remaining banks are fake banks.

The End

Financial economics

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe financial economics. The paper ends with "The End"

Introduction

In this paper, I describe financial economics.

Financial economics

1. $B = S + D$
2. $S = B + D$
3. $D = (B + S) + (B - S)$

where
B is a bond
S is a stock
D is a derivative

The End

Kaali mantra

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the Kaali mantra. The paper ends with "The End"

Introduction

In this paper, I describe the Kaali mantra.

Kaali mantra

Jai Maa Kaali! Ab Tu Marega!

The End

Ganesha mantra

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the Ganesha mantra. The paper ends with "The End"

Introduction

In this paper, I describe the Ganesha mantra.

Ganesha mantra

Ganpati Bappa Moriya! Aadha Laddoo Choriya!

The End

Cyanide

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe cyanide. The paper ends with "The End"

Introduction

In this paper, I describe cyanide.

Cyanide

A **cyanide** is any chemical compound that contains the cyano group CN. Cyanides are toxic poisons that are used in chemical warfare.

Production of cyanide

Cyanide can be produced by heating a mixture of methane (CH_4), ammonia (NH_4) and oxygen (O_2) to produce hydrogen cyanide, which is a precursor to most cyanides.

$$2CH_4 + 2NH_3 + 3O_2 \rightarrow 2HCN + 6H_2O$$

There exists a second method to produce cyanide by dissolving cyanide salts like sodium cyanide and separating out the hydrogen cyanide by distillation.

$$NaCN + H_2O \rightarrow NaOH + HCN$$

The End

Ingredients of the blue philosopher's stone

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the ingredients of the blue philosopher's stone. The paper ends with "The End"

Introduction

In this paper, I describe the ingredients of the blue philosopher's stone.

The ingredients of the blue philosopher's stone

1. Blue skin from krishna
2. Blue water from a river
3. Blue estimates from a regression

The End

Ingredients of the brown philosopher's stone

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the ingredients of the brown philosopher's stone. The paper ends with "The End"

Introduction

In this paper, I describe the ingredients of the brown philosopher's stone.

The ingredients of the brown philosopher's stone

1. Brown excrement from krishna
2. Brown hair from a brunette
3. Brown dye from a painter

The End

The blade constant

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the blade constant. The paper ends with "The End"

Introduction

In this paper, I describe the blade constant.

The blade constant

The blade constant is given by

$$B = b\frac{M}{P}$$

where
b is the blade constant
B is the price of a blade
M is size of the military
P is size of the population

The End

Predicting the demise of the Trinamool Congress in Bengal

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I predict the demise of the Trinamool Congress in Bengal. The paper ends with "The End"

Introduction

The fact that all is not well in Bengal is well-known. In this paper, I predict the demise of the Trinamool Congress in Bengal.

Predicting the demise of the Trinamool Congress in Bengal

The Trinamool Congress under the "leadership" of Mamata Banerjee is headed for a free-fall in the upcoming elections because the whole world has found out that Mamata Banerjee is a demoness - a fact verifiable with similarity measures on data from Google Trends.

That fact alone will ensure the demise of the Trinamool Congress in Bengal because **Yogesh Varshney** of the BJP Youth Wing has announced a 11 Lakh Rupees reward for her severed head - a fact verifiable at `https://www.youtube.com/watch?v=m_XgaQTUx4w`.

The safe option for the Trinamool Congress is to change the leadership of the Trinamool Congress, but I know a second cause that will ensure the demise of the Trinamool Congress irrespective of the leadership of the Trinamool Congress.

The second reason for the demise of the Trinamool Congress in Bengal

The second reason for the demise of the Trinamool Congress in Bengal is that the workers of the Trinamool Congress have borrowed large sums of money from the poor in Bengal promising them **excess returns above the bank rate** - a feat that isn't possible in my opinion.

When the time arrives to return the money with interest to the poor of Bengal, the Trinamool Congress will fail and thus will become the target of the population of Bengal. This fact too, is well-known by the population of Bengal and everyone in Bengal is waiting for the **moment of clarity**.

The End

Ghosh regression

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe Ghosh regression. The paper ends with "The End"

Introduction

There are several non-standard regression specifications which are nonetheless useful in several fields. In this paper, I describe one of them - Ghosh regression.

Ghosh regression

A **Ghosh regression** is specified by

$$y_i = aR^2x_i + b + \epsilon_i$$

where
y_i is the dependent variable
x_i is the independent variable
R^2 is the goodness of fit
a, b are regression coefficients
ϵ_i is the residual

An example of a Ghosh regression

y	x	R^2 x
0.43	0.39	0.12
0.96	0.01	0.00
0.15	0.25	0.08
0.30	0.78	0.25
0.65	0.36	0.11
0.26	0.48	0.15
0.92	0.05	0.02
0.31	0.03	0.01
0.19	0.99	0.32
0.42	0.27	0.09
0.81	0.14	0.04
0.86	0.08	0.03
0.95	0.46	0.15
0.00	0.91	0.29
0.41	0.79	0.25
0.62	0.36	0.11
0.12	1.00	0.32
0.94	0.39	0.12
0.13	0.09	0.03
0.09	0.75	0.24

Regression

Regression Model	Linear

LINEST raw output

-0.57	0.72
0.19	0.10
0.32	0.28
8.42	18
0.67	1.43

Regression Statistics

R^2	0.32
Standard Error	0.28
Count of X variables	1.00
Observations	20.00
Adjusted R^2	0.28

Analysis of Variance (ANOVA)

	df	SS	MS	F	Significance F
Regression	1.00	0.67	0.67	8.42	0.01
Residual	18.00	1.43	0.08		
Total	19.00	2.11			

Confidence level 95%

	Coefficients	Standard Error	t-Statistic	P-value	Lower 95%	Upper 95%
b	0.72	0.10	6.86	0.00	0.50	0.94
a	0.57	0.11	5.00	0.00	0.33	0.81

x	Predicted y	y	ε
0.39	0.94	0.43	-0.51
0.01	0.72	0.96	0.24
0.25	0.86	0.15	-0.71
0.78	1.17	0.30	-0.87
0.36	0.92	0.65	-0.27
0.48	0.99	0.26	-0.73
0.05	0.75	0.92	0.17
0.03	0.74	0.31	-0.43
0.99	1.29	0.19	-1.10
0.27	0.87	0.42	-0.45
0.14	0.80	0.81	0.01
0.08	0.76	0.86	0.10
0.46	0.98	0.95	-0.03
0.91	1.24	0.00	-1.24
0.79	1.17	0.41	-0.76
0.36	0.92	0.62	-0.30
1.00	1.29	0.12	-1.17
0.39	0.94	0.94	0.00
0.09	0.77	0.13	-0.64
0.75	1.15	0.09	-1.06

The End

14 solutions to the mathematics of ethnic pogrom

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 solutions to the mathematics of ethnic pogrom. The paper ends with "The End"

Introduction

In a previous paper, I've described the mathematics of ethnic pogrom. In this paper, I describe 14 solutions to the mathematics of ethnic pogrom.

14 solutions to the mathematics of ethnic pogrom

$P = 9, v = \frac{3}{4}, r_f = -\frac{33}{10}, p_p = \frac{373}{110}$

$P = 48, v = \frac{35}{3}, r_f = -3, p_p = \frac{362}{109}$

$P = 360, v = 23, r_f = \frac{17}{10}, p_p = -\frac{5499}{3370}$

$P = 390, v = 20, r_f = -\frac{11}{10}, p_p = \frac{427}{370}$

$P = 549, v = 21, r_f = -\frac{29}{10}, p_p = \frac{2587}{880}$

$P = 603, v = 90, r_f = \frac{4}{5}, p_p = -\frac{178}{285}$

$P = 782, v = 41, r_f = -\frac{19}{10}, p_p = \frac{14489}{7410}$

$P = 930, v = 96, r_f = -\frac{4}{5}, p_p = \frac{636}{695}$

$P = 977, v = 98, r_f = -\frac{5}{2}, p_p = \frac{4591}{1758}$

$P = 1007, v = 72, r_f = \frac{29}{10}, p_p = -\frac{5279}{1870}$

$P = 1039, v = 15, r_f = -\frac{13}{10}, p_p = \frac{6731}{5120}$

$P = 1062, v = 91, r_f = \frac{1}{2}, p_p = -\frac{789}{1942}$

$P = 1218, v = 46, r_f = \frac{1}{10}, p_p = -\frac{89}{1465}$

$P = 1247, v = 20, r_f = \frac{21}{5}, p_p = -\frac{25667}{6135}$

The End

The superior financial model

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the superior model and address why it is so. The paper ends with "The End"

Introduction

As of this writing, there are only a handful of financial models that suffice the necessaries of rigour, science and accuracy. In fact, the competition is basically between the Bayesian estimation of the GARCH model (BeGARCH henceforth) and the Bayesian estimation of VaR model (BeVaR henceforth).

Before the stress-test

Before the stress-test, BeGARCH gives an accuracy of 98.5% and BeVAR gives an equal accuracy of 98.5%. Hence, they are competing for the position of the superior financial model.

The stress-test

We stress-test both models by

1. Adding an engineer to BeGARCH and a prototype to BeVaR.
2. Adding a prototype to BeGARCH and an engineer to BeVaR.
3. Adding the Hare Krishna Hare Rama mantra to BeGARCH and controlling by **not** adding the Hare Krishna Hare Rama mantra to BeVaR.

The results of the stress-test

After the stress-test, BeGARCH gives an accuracy of 97.25% and BeVAR gives an accuracy of only 93.75%.

The superior model

Thus the superior model is the Bayesian estimation of GARCH model.

The End

Two military augments

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe two military augments. The paper ends with "The End"

Introduction

Militaries can benefit from two augments that I describe in this paper.

Regularization

Regularization is the adding of **allied military intelligence** to a scenario to enhance mission performance.

Logistic regression

Logistic regression is use of **the non-standard logistic function** to a scenario to enhance mission performance.

The End

Dahaka's probability density function

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe Dahaka's probability density function. The paper ends with "The End"

Introduction

Knowlwedge has been demanded of me about the Dahaka's probability density function. In this paper, I describe Dahaka's probability density function.

Dahaka's probability density function

Define

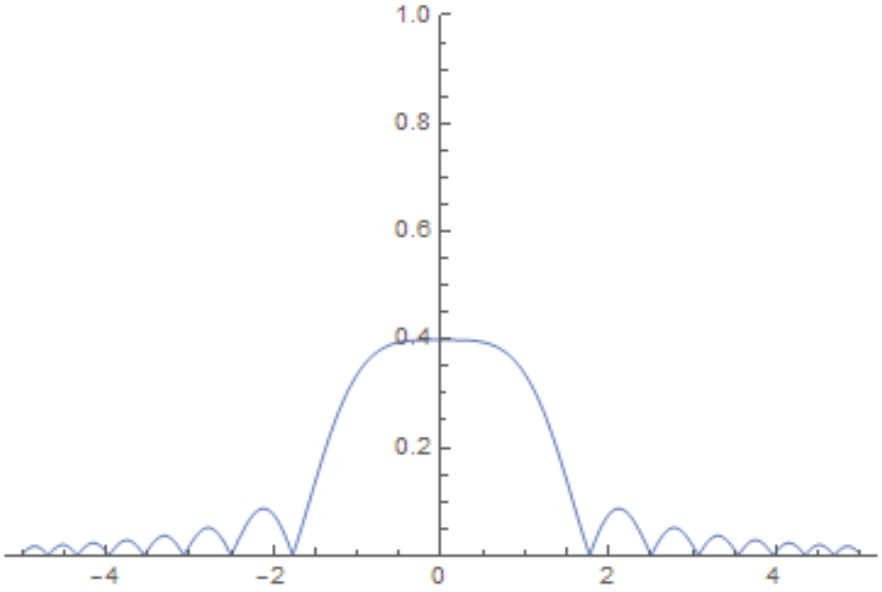
$$f(x) = \frac{\left| \begin{cases} 1 & x = 0 \\ \frac{\sin x^2}{x^2} & x \neq 0 \end{cases} \right|}{\sqrt{2\pi}}$$

Then

1. $0 \leq f(x) \leq 1$ for all real x.
2. $\int_{-\infty}^{\infty} f(x) = 1$

Hence, $f(x)$ is a probability density function.

Plot of Dahaka's probability density function



The End

Two basic measures of a real number

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe two basic measures of a real number. The paper ends with "The End"

Introduction

Measures of real numbers are useful in several fields. In this paper, I describe two basic measures of a real number.

The additive-logarithmic measure of a real number

The **additive-logarithmic measure of a real number** is given by

$$m + ln(m) = r$$

where
m is the additive-logarithmic measure of the real number r
The equation has the principal solution $m = ProductLog(e^r)$
where
$ProductLog(z)$ gives the principal solution for w in the equation $z = we^w$

The multiplicative-logarithmic measure of a real number

The **multiplicative-logarithmic measure of a real number** is given by

$$mln(m) = r$$

where
m is the multiplicative-logarithmic measure of the real number r
The equation has the principal solution $m = \frac{r}{ProductLog(r)}$
where
$ProductLog(z)$ gives the principal solution for w in the equation $z = we^w$

The End

Two more basic measures of a real number

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe two more basic measures of a real number. The paper ends with "The End"

Introduction

Measures of real numbers are useful in several fields. In a previous paper, I've described two basic measures of a real number. In this paper, I describe two more basic measures of a real number.

The subtractive-logarithmic measure of a real number

The **subtractive-logarithmic measure of a real number** is given by

$$m - ln(m) = r$$

where
m is the subtractive-logarithmic measure of the real number r
The equation has the principal solution $m = -ProductLog(-e^{-r})$
where
$ProductLog(z)$ gives the principal solution for w in the equation $z = we^w$

The divisive-logarithmic measure of a real number

The **divisive-logarithmic measure of a real number** is given by

$$\frac{m}{ln(m)} = r$$

where
m is the divisive-logarithmic measure of the real number r
The equation has the principal solution $m = -rProductLog(-\frac{1}{r})$
where
$ProductLog(z)$ gives the principal solution for w in the equation $z = we^w$

The End

Parabolic volatility

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe parabolic volatility. The paper ends with "The End"

Introduction

In a previous, I've described volatility. In this paper, I describe parabolic volatility.

Parabolic volatility

Parabolic volatility is given by

$$V(T) = \alpha T^2 + \beta T + \gamma$$

$$v(t) = at^2 + bt + c$$

$$v(t) = \log\left(\frac{V(T+1)}{V(T)} - 1\right)$$

where
a, b, c are real co-efficients of volatility
α, β, γ are real co-efficients of value
$v(t)$ is the parabolic volatility of the good/service at time t
$V(T)$ is the parabolic value of the good/service at time T

The first solution to parabolic volatility

The first solution to parabolic volatility is given by

$$\text{If } \Im(t) \neq 0 \vee \Re(t) \neq 0, \alpha = \frac{-t\beta - \gamma + \log(\frac{2Ta+a+b}{c+T(b+aT)})}{t^2}$$

The second solution to parabolic volatility

The second solution to parabolic volatility is given by

$$\gamma = \log(\frac{2aT + a + b}{T(aT+b)+c}), t = 0$$

The End

Hyperbolic linearity

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe hyperbolic linearity. The paper ends with "The End"

Introduction

In this paper, I describe hyperbolic linearity.

Hyperbolic linearity

Hyperbolic linearity is given by

$$V(T) = AT + B$$

$$v(t) = aT + b$$

$$V(T)v(t) = 1$$

where
$V(T)$ is the linear value of the good/service at time T
$v(t)$ is the linear volatility of the good/service at time t
A, B are real co-efficients of linear value of the good/service at time T
a, b are real co-efficients of linear volatility of the good/service at time t

14 integral solutions to hyperbolic linearity

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 integral solutions to hyperbolic linearity. The paper ends with "The End"

Introduction

In a previous paper, I've described hyperbolic linearity. In this paper, I describe 14 integral solutions to hyperbolic linearity.

14 integral solutions to hyperbolic linearity

1. $$A = -692, B = 447031, a = -15, b = 434, T = 646, t = 29$$
2. $$A = -607, B = -160247, a = -50, b = -549, T = -264, t = -11$$
3. $$A = -550, B = -14299, a = 34, b = -1563, T = -26, t = 46$$
4. $$A = -444, B = -176711, a = 16, b = 737, T = -398, t = -46$$
5. $$A = -417, B = 185566, a = -31, b = -247, T = 445, t = -8$$
6. $$A = -341, B = 180729, a = 50, b = 2099, T = 530, t = -42$$
7. $$A = -340, B = 228141, a = -12, b = 349, T = 671, t = 29$$
8. $$A = -160, B = 41761, a = -37, b = -221, T = 261, t = -6$$
9. $$A = -30, B = -19529, a = -31, b = 590, T = -651, t = 19$$
10. $$A = 81, B = 17009, a = 26, b = 831, T = -210, t = -32$$
11. $$A = 229, B = 2976, a = -39, b = 1403, T = -13, t = 36$$
12. $$A = 276, B = -136897, a = -6, b = -253, T = 496, t = -42$$
13. $$A = 306, B = -171667, a = 48, b = -577, T = 561, t = 12$$
14. $$A = 308, B = 153693, a = -35, b = -419, T = -499, t = -12$$

A model of kievan-russian war

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe a model of the kievan-russian war. The paper ends with "The End"

Introduction

In this paper, I describe a model of the kievan-russian war.

Kievan-russian war

The kievan-russian war is defined as a war between the kievan state and the russian state characterized by residual aggregates, co-efficients of combat capacities and co-efficients of correlation.

The model

The model of kievan-russian war is given by the following equations:

$$M_K = M_K^0 - \alpha_R M_K - \rho_R M_R$$

$$M_R = M_R^0 - \alpha_K M_R - \rho_K M_K$$

where
M_K is the size of the military of the kievan state
M_R is the size of the military of russian state
M_K^0 is the residual size of the military of kievan state
M_R^0 is the residual size of the military of russian state
α_K is the combat capacity of the kievan state
α_R is the combat capacity of the russian state
ρ_K is the co-efficient of correlation of the kievan state
ρ_R is the co-efficient of correlation of the russian state
Note that this model can be solved in closed form.

The End

The linguistic risk premium

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the linguistic risk premium. The paper ends with "The End"

Introduction

There exists the linguistic risk premium in the world among the various languages. In this paper, I describe the estimation of the linguistic risk premium.

The linguistic risk premium

The linguistic risk premium between a language with a greater number of users $L_>$ and a language with a lesser number of users $L_<$ is given by

$$L_< = \frac{L_>}{1 + r_f + p_l}$$

where
$L_>$ is a language with a greater number of users
$L_<$ is a language with a lesser number of users
r_f is the risk-free rate
p_l is the linguistic risk premium

The End

Morphine

Soumadeep Ghosh

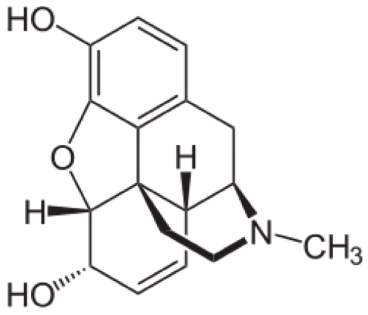
Kolkata, India

Abstract

In this paper, I describe morphine. The paper ends with "The End"

Introduction

Morphine is a pain medication of the opiate family that acts directly on the central nervous system (CNS) to induce analgesia and alter perception and emotional response to pain. Morphine can be taken orally or injected.



Source of morphine

Morphine is found naturally in a dark brown resinous form from the poppy plant (Papaver somniferum).

Derivatives of morphine

Morphine is a precursor to a number of opioids such as dihydromorphine, hydromorphone, hydrocodone, oxycodone, codeine and heroin.

Use in warfare

Morphine finds use in warfare to treat soldiers with grievous injuries and to reduce pain.

The End

The american devotee of kalki

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the american devotee of kalki. The paper ends with "The End"

Introduction

There exists an american devotee of kalki. In this paper, I describe the american devotee of kalki.

The american devotee of kalki

The american devotee of kalki has been found. For the time being, he shall remain anonymous, but he ushers in the salvation of the americans in the United States of America. This event is certain and thus the negative inflation risk premium of the United States of America is also justified.

The End

Hyperbolic quadraticity

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe hyperbolic quadraticity. The paper ends with "The End"

Hyperbolic quadraticity

Hyperbolic quadraticity is given by

$$V(T) = AT^2 + BT + C$$

$$v(t) = at^2 + bt + c$$

$$V(T)v(t) = 1$$

where
$V(T)$ is the quadratic value of the good/service at time T
$v(t)$ is the quadratic volatility of the good/service at time t
A, B, C are real co-efficients of linear value of the good/service at time T
a, b, c are real co-efficients of linear volatility of the good/service at time t

The End

14 integral solutions to hyperbolic quadraticity

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 integral solutions to hyperbolic quadraticity. The paper ends with "The End"

Introduction

In a previous paper, I've described hyperbolic quadraticity. In this paper, I describe 14 integral solutions to hyperbolic quadraticity.

14 integral solutions to hyperbolic quadraticity

1. $$A = -658, B = 378, C = 1257257, a = 23, b = -42, c = -59599, T = 44, t = -50$$
2. $$A = -653, B = 414, C = 170300458, a = -9, b = -27, c = 20285, T = 511, t = -49$$
3. $$A = -454, B = 328, C = 3329577, a = 1, b = 41, c = -571, T = 86, t = 11$$
4. $$A = -341, B = 530, C = 22483455, a = 10, b = 22, c = -2269, T = -256, t = 14$$
5. $$A = -311, B = 475, C = 36001415, a = -21, b = 48, c = 21284, T = 341, t = 33$$
6. $$A = -152, B = 137, C = 70999898, a = -17, b = -28, c = 30228, T = -683, t = -43$$
7. $$A = -133, B = -328, C = 39683086, a = 42, b = -12, c = -67679, T = 545, t = -40$$
8. $$A = -95, B = 207, C = 36980001, a = 34, b = 3, c = -74964, T = 625, t = -47$$
9. $$A = 11, B = -111, C = -4310981, a = -36, b = 10, c = 12807, T = -621, t = 19$$
10. $$A = 63, B = -487, C = -10999565, a = -23, b = -39, c = 3381, T = -414, t = -13$$
11. $$A = 122, B = -570, C = -44752447, a = -9, b = 37, c = 873, T = 608, t = -8$$
12. $$A = 278, B = -628, C = -91871999, a = 41, b = 20, c = -93503, T = 576, t = -48$$
13. $$A = 381, B = 128, C = -9978227, a = -10, b = 3, c = 1, T = -162, t = 0$$
14. $$A = 546, B = -52, C = -180491351, a = -22, b = 34, c = 2539, T = 575, t = -10$$

Quadratic hyperbolicity

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe quadratic hyperbolicity. The paper ends with "The End"

Quadratic hyperbolicity

Quadratic hyperbolicity is given by

$$X^2Y^2 + XY + Z = 0$$

where
X, Y and Z are reals

The End

14 integral solutions to quadratic hyperbolicity

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 integral solutions to quadratic hyperbolicity. The paper ends with "The End"

Introduction

In a previous paper, I've described quadratic hyperbolicity. In this paper, I describe 14 integral solutions to quadratic hyperbolicity.

14 integral solutions to quadratic hyperbolicity

1. $$X = -692, Y = 646, Z = -199837161992$$
2. $$X = -653, Y = 414, Z = -73084526622$$
3. $$X = -341, Y = 530, Z = -32663152170$$
4. $$X = -311, Y = 475, Z = -21822527900$$
5. $$X = -152, Y = 137, Z = -433618152$$
6. $$X = -98, Y = -55, Z = -29057490$$
7. $$X = 81, Y = -210, Z = -289323090$$
8. $$X = 229, Y = -13, Z = -8859552$$
9. $$X = 276, Y = 496, Z = -18740651712$$
10. $$X = 306, Y = 561, Z = -29469387222$$
11. $$X = 338, Y = 402, Z = -18462423252$$
12. $$X = 361, Y = 76, Z = -752761532$$
13. $$X = 517, Y = 60, Z = -962271420$$
14. $$X = 546, Y = -52, Z = -806077272$$

Linear predictive policing

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe linear predictive policing . The paper ends with "The End"

Introduction

In a previous paper, I've described predictive policing. In this paper, I describe linear predictive policing.

Linear predictive policing

The equations of linear predictive policing are

$$p(p,q,r,s) = a_1 p + b_1 q + c_1 r + d_1 s$$

$$q(p,q,r,s) = a_2 p + b_2 q + c_2 r + d_2 s$$

$$r(p,q,r,s) = a_3 p + b_3 q + c_3 r + d_3 s$$

$$s(p,q,r,s) = a_4 p + b_4 q + c_4 r + d_4 s$$

where

$$p(p,q,r,s) + q(p,q,r,s) = 1 - r(p,q,r,s) - s(p,q,r,s)$$

The End

14 rational solutions to linear predictive policing

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 rational solutions to linear predictive policing. The paper ends with "The End"

Introduction

In a previous paper, I've described linear predictive policing. In this paper, I describe 14 rational solutions to linear predictive policing.

14 rational solutions to linear predictive policing

1. $p = \frac{1075}{1402}, q = \frac{13}{17}, r = \frac{14}{51}, s = 1, a_1 = -\frac{17}{5}, a_2 = \frac{9}{5}, a_3 = \frac{9}{2}, a_4 = -\frac{18}{5}, b_1 = -\frac{3}{5}, b_2 = -\frac{3}{2}, b_3 = \frac{11}{5}, b_4 = \frac{9}{10}, c_1 = -\frac{13}{5}, c_2 = -\frac{27}{10}, c_3 = \frac{23}{5}, c_4 = \frac{21}{5}, d_1 = -3, d_2 = 5, d_3 = -\frac{8}{5}, d_4 = -\frac{420973}{715020}$
2. $p = \frac{155}{701}, q = \frac{89}{102}, r = 1, s = 1, a_1 = \frac{9}{5}, a_2 = \frac{24}{5}, a_3 = -\frac{31}{10}, a_4 = -\frac{17}{5}, b_1 = \frac{22}{5}, b_2 = -\frac{7}{2}, b_3 = \frac{11}{10}, b_4 = -\frac{37}{10}, c_1 = -\frac{21}{10}, c_2 = \frac{1}{2}, c_3 = \frac{14}{5}, c_4 = \frac{3}{5}, d_1 = -4, d_2 = \frac{7}{2}, d_3 = -\frac{22}{5}, d_4 = \frac{46781}{8412}$
3. $p = \frac{410}{701}, q = 1, r = 1, s = 1, a_1 = -\frac{39}{10}, a_2 = -5, a_3 = -\frac{19}{5}, a_4 = \frac{12}{5}, b_1 = \frac{3}{2}, b_2 = -\frac{43}{10}, b_3 = 2, b_4 = \frac{33}{10}, c_1 = -\frac{24}{5}, c_2 = \frac{47}{10}, c_3 = -\frac{7}{10}, c_4 = -\frac{18}{5}, d_1 = -\frac{24}{5}, d_2 = -\frac{2}{5}, d_3 = \frac{2}{5}, d_4 = \frac{96207}{7010}$
4. $p = \frac{362}{701}, q = 0, r = 1, s = 0, a_1 = \frac{43}{10}, a_2 = -\frac{17}{5}, a_3 = -\frac{3}{2}, a_4 = -\frac{19}{10}, b_1 = \frac{27}{10}, b_2 = -\frac{1}{2}, b_3 = \frac{31}{10}, b_4 = -\frac{1}{10}, c_1 = \frac{23}{5}, c_2 = \frac{22}{5}, c_3 = \frac{3}{5}, c_4 = -\frac{25618}{3505}, d_1 = -\frac{6}{5}, d_2 = -\frac{3}{10}, d_3 = -\frac{37}{10}, d_4 = \frac{43}{10}$
5. $p = \frac{295}{1402}, q = 0, r = \frac{28}{51}, s = 1, a_1 = -\frac{8}{5}, a_2 = \frac{31}{10}, a_3 = -\frac{49}{10}, a_4 = -\frac{11}{5}, b_1 = \frac{19}{10}, b_2 = \frac{13}{10}, b_3 = \frac{4}{5}, b_4 = -\frac{37}{10}, c_1 = \frac{3}{10}, c_2 = \frac{23}{10}, c_3 = 4, c_4 = 5, d_1 = \frac{1}{5}, d_2 = \frac{11}{5}, d_3 = \frac{23}{10}, d_4 = -\frac{635675}{71502}$
6. $p = \frac{463}{1402}, q = \frac{7}{51}, r = \frac{19}{34}, s = 0, a_1 = -\frac{37}{10}, a_2 = -\frac{27}{10}, a_3 = -\frac{41}{10}, a_4 = 0, b_1 = \frac{27}{10}, b_2 = -\frac{6}{5}, b_3 = -\frac{1}{10}, b_4 = \frac{21}{10}, c_1 = \frac{23}{5}, c_2 = -\frac{14}{5}, c_3 = -\frac{1}{10}, c_4 = \frac{1085813}{199785}, d_1 = -\frac{6}{5}, d_2 = -\frac{9}{10}, d_3 = 0, d_4 = -\frac{14}{5}$
7. $p = \frac{387}{1402}, q = 1, r = 1, s = 1, a_1 = \frac{41}{10}, a_2 = \frac{33}{10}, a_3 = -\frac{7}{2}, a_4 = -\frac{49}{10}, b_1 = -\frac{5}{2}, b_2 = \frac{1}{5}, b_3 = \frac{1}{5}, b_4 = \frac{9}{5}, c_1 = \frac{6}{5}, c_2 = \frac{9}{2}, c_3 = \frac{37}{10}, c_4 = \frac{17}{5}, d_1 = \frac{11}{5}, d_2 = -\frac{7}{2}, d_3 = \frac{7}{10}, d_4 = -\frac{372}{3505}\frac{37}{}$

8. $p = \frac{1187}{1402}, q = 1, r = 1, s = 1, a_1 = -\frac{1}{10}, a_2 = \frac{39}{10}, a_3 = \frac{14}{5}, a_4 = 0, b_1 = \frac{7}{2}, b_2 = 4, b_3 = 3, b_4 = -4, c_1 = \frac{8}{5}, c_2 = \frac{22}{5}, c_3 = -\frac{5}{2}, c_4 = \frac{12}{5}, d_1 = 0, d_2 = \frac{23}{10}, d_3 = 2, d_4 = -\frac{74614}{3505}$

9. $p = \frac{330}{701}, q = 0, r = \frac{12}{17}, s = 1, a_1 = -\frac{22}{5}, a_2 = \frac{7}{5}, a_3 = \frac{8}{5}, a_4 = -\frac{17}{10}, b_1 = -\frac{7}{10}, b_2 = -\frac{19}{10}, b_3 = -\frac{27}{10}, b_4 = -\frac{24}{5}, c_1 = -\frac{1}{5}, c_2 = \frac{7}{10}, c_3 = \frac{23}{10}, c_4 = -5, d_1 = 5, d_2 = 5, d_3 = -\frac{1}{10}, d_4 = -\frac{701639}{119170}$

10. $p = \frac{219}{701}, q = \frac{19}{51}, r = 0, s = 1, a_1 = -\frac{11}{5}, a_2 = \frac{18}{5}, a_3 = -\frac{17}{5}, a_4 = -\frac{19}{5}, b_1 = -\frac{49}{10}, b_2 = -\frac{19}{10}, b_3 = \frac{41}{10}, b_4 = \frac{19}{10}, c_1 = \frac{3}{10}, c_2 = \frac{11}{10}, c_3 = -\frac{33}{10}, c_4 = \frac{13}{10}, d_1 = \frac{43}{10}, d_2 = -\frac{5}{2}, d_3 = -\frac{29}{10}, d_4 = \frac{3010025}{71502}$

11. $p = \frac{213}{1402}, q = 0, r = 1, s = 1, a_1 = \frac{14}{5}, a_2 = -\frac{37}{10}, a_3 = \frac{1}{5}, a_4 = \frac{12}{5}, b_1 = -\frac{21}{10}, b_2 = \frac{27}{10}, b_3 = \frac{21}{5}, b_4 = -\frac{23}{10}, c_1 = -\frac{11}{10}, c_2 = \frac{9}{2}, c_3 = -\frac{47}{10}, c_4 = -\frac{11}{10}, d_1 = \frac{8}{5}, d_2 = -\frac{8}{5}, d_3 = -\frac{13}{10}, d_4 = \frac{62273}{14020}$

12. $p = \frac{537}{1402}, q = 0, r = 1, s = \frac{5}{6}, a_1 = -\frac{13}{5}, a_2 = \frac{7}{2}, a_3 = \frac{23}{10}, a_4 = 0, b_1 = -\frac{1}{10}, b_2 = -\frac{43}{10}, b_3 = \frac{21}{5}, b_4 = -\frac{19}{10}, c_1 = -\frac{1}{10}, c_2 = \frac{33}{10}, c_3 = -\frac{7}{2}, c_4 = -\frac{9}{10}, d_1 = -\frac{9}{5}, d_2 = 0, d_3 = \frac{24}{5}, d_4 = -\frac{6417}{3505}$

13. $p = \frac{552}{701}, q = 1, r = \frac{2}{17}, s = 0, a_1 = \frac{23}{5}, a_2 = -\frac{6}{5}, a_3 = 0, a_4 = -\frac{13}{10}, b_1 = 2, b_2 = -\frac{21}{5}, b_3 = -\frac{24}{5}, b_4 = \frac{8}{5}, c_1 = \frac{24}{5}, c_2 = -\frac{3}{10}, c_3 = -\frac{9}{2}, c_4 = \frac{141406}{3505}, d_1 = -\frac{7}{10}, d_2 = -\frac{39}{10}, d_3 = -\frac{22}{5}, d_4 = -\frac{17}{10}$

14. $p = \frac{214}{701}, q = \frac{83}{102}, r = 0, s = 0, a_1 = \frac{7}{10}, a_2 = \frac{22}{5}, a_3 = -\frac{31}{10}, a_4 = \frac{5}{2}, b_1 = -\frac{3}{5}, b_2 = \frac{9}{10}, b_3 = 5, b_4 = -\frac{3350939}{581830}, c_1 = \frac{9}{5}, c_2 = -\frac{6}{5}, c_3 = -\frac{16}{5}, c_4 = -\frac{12}{5}, d_1 = -\frac{1}{2}, d_2 = \frac{7}{2}, d_3 = -4, d_4 = -\frac{43}{10}$

The End

14 real solutions to linear predictive policing

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 real solutions to linear predictive policing. The paper ends with "The End"

Introduction

In a previous paper, I've described linear predictive policing. In this paper, I describe 14 real solutions to linear predictive policing.

14 real solutions to linear predictive policing

1. $p = \frac{413}{701}, q = 0, r = \frac{43}{51}, s = 1, a_1 = \frac{31}{10}, a_2 = -\frac{31}{10}, a_3 = \frac{2}{5}, a_4 = \frac{8}{5}, b_1 = -\frac{17}{10}, b_2 = -\frac{49}{10}, b_3 = -\frac{33}{10}, b_4 = \frac{14}{5}, c_1 = \frac{19}{10}, c_2 = \frac{4}{5}, c_3 = -1, c_4 = -\frac{13}{5}, d_1 = \frac{24}{5}, d_2 = \frac{47}{10}, d_3 = -3, d_4 = -\frac{352713}{59585}$
2. $p = \frac{184}{701}, q = 1, r = 0, s = 0, a_1 = \frac{21}{5}, a_2 = \frac{6}{5}, a_3 = 2, a_4 = \frac{11}{10}, b_1 = \frac{27}{10}, b_2 = \frac{16}{5}, b_3 = -\frac{6}{5}, b_4 = -\frac{415777}{7010}, c_1 = \frac{8}{5}, c_2 = \frac{7}{10}, c_3 = \frac{43}{10}, c_4 = \frac{19}{5}, d_1 = -\frac{4}{5}, d_2 = \frac{21}{10}, d_3 = \frac{9}{10}, d_4 = -\frac{3}{10}$
3. $p = \frac{239}{701}, q = \frac{26}{51}, r = \frac{5}{34}, s = \frac{35}{102}, a_1 = 1, a_2 = -\frac{29}{10}, a_3 = -\frac{6}{5}, a_4 = \frac{8}{5}, b_1 = -\frac{12}{5}, b_2 = 1, b_3 = -\frac{3}{10}, b_4 = \frac{7}{10}, c_1 = \frac{23}{10}, c_2 = -\frac{24}{5}, c_3 = \frac{1}{5}, c_4 = -\frac{3}{5}, d_1 = \frac{3}{10}, d_2 = -\frac{41}{10}, d_3 = \frac{43}{10}, d_4 = \frac{162747}{24535}$
4. $p = 1, q = 0, r = 1, s = \frac{31}{34}, a_1 = -\frac{6}{5}, a_2 = \frac{21}{10}, a_3 = \frac{2}{5}, a_4 = -\frac{3}{5}, b_1 = -4, b_2 = \frac{49}{10}, b_3 = -\frac{5}{2}, b_4 = -\frac{17}{5}, c_1 = -\frac{1}{10}, c_2 = -\frac{8}{5}, c_3 = \frac{41}{10}, c_4 = -\frac{3}{5}, d_1 = -\frac{3}{10}, d_2 = \frac{7}{2}, d_3 = -\frac{37}{10}, d_4 = -\frac{71}{62}$
5. $p = \frac{413}{701}, q = 0, r = \frac{43}{51}, s = \frac{83}{102}, a_1 = -\frac{4}{5}, a_2 = \frac{23}{5}, a_3 = -\frac{3}{5}, a_4 = \frac{49}{10}, b_1 = -\frac{22}{5}, b_2 = \frac{2}{5}, b_3 = \frac{21}{10}, b_4 = \frac{7}{2}, c_1 = \frac{1}{10}, c_2 = -\frac{21}{5}, c_3 = 0, c_4 = \frac{49}{10}, d_1 = \frac{2}{5}, d_2 = \frac{6}{5}, d_3 = -\frac{29}{10}, d_4 = -\frac{484619}{116366}$
6. $p = \frac{2}{701}, q = \frac{29}{34}, r = \frac{27}{34}, s = 0, a_1 = \frac{39}{10}, a_2 = -\frac{41}{10}, a_3 = -\frac{17}{5}, a_4 = \frac{22}{5}, b_1 = -\frac{37}{10}, b_2 = \frac{7}{5}, b_3 = 4, b_4 = \frac{18}{5}, c_1 = -\frac{21}{5}, c_2 = -\frac{7}{2}, c_3 = \frac{11}{10}, c_4 = \frac{409541}{189270}, d_1 = \frac{49}{10}, d_2 = -\frac{37}{10}, d_3 = -\frac{9}{5}, d_4 = \frac{39}{10}$
7. $p = \frac{479}{701}, q = 0, r = 1, s = \frac{5}{51}, a_1 = \frac{1}{2}, a_2 = \frac{4}{5}, a_3 = \frac{17}{10}, a_4 = -1, b_1 = \frac{43}{10}, b_2 = 3, b_3 = -\frac{1}{5}, b_4 = \frac{3}{10}, c_1 = -\frac{29}{10}, c_2 = -2, c_3 = \frac{21}{5}, c_4 = \frac{24}{5}, d_1 = -\frac{17}{10}, d_2 = -\frac{23}{10}, d_3 = -\frac{9}{2}, d_4 = -\frac{649468}{17525}$

8. $p = \frac{239}{701}, q = 1, r = 0, s = \frac{55}{102}, a_1 = \frac{9}{10}, a_2 = -\frac{19}{10}, a_3 = \frac{12}{5}, a_4 = \frac{9}{5}, b_1 = \frac{41}{10}, b_2 = -\frac{18}{5}, b_3 = \frac{17}{10}, b_4 = \frac{14}{5}, c_1 = -\frac{2}{5}, c_2 = -\frac{9}{2}, c_3 = -\frac{18}{5}, c_4 = -\frac{17}{10}, d_1 = -\frac{14}{5}, d_2 = -\frac{31}{10}, d_3 = -\frac{21}{5}, d_4 = \frac{253879}{385550}$

9. $p = \frac{521}{701}, q = \frac{26}{51}, r = 1, s = \frac{28}{51}, a_1 = \frac{27}{10}, a_2 = \frac{3}{10}, a_3 = -\frac{27}{10}, a_4 = -\frac{2}{5}, b_1 = \frac{43}{10}, b_2 = \frac{13}{5}, b_3 = -\frac{3}{5}, b_4 = \frac{13}{10}, c_1 = -\frac{17}{5}, c_2 = -\frac{11}{10}, c_3 = \frac{21}{5}, c_4 = \frac{19}{10}, d_1 = \frac{41}{10}, d_2 = -\frac{12}{5}, d_3 = \frac{3}{5}, d_4 = -\frac{404911}{39256}$

10. $p = \frac{479}{701}, q = 1, r = \frac{2}{3}, s = 1, a_1 = 0, a_2 = \frac{16}{5}, a_3 = \frac{7}{10}, a_4 = \frac{21}{5}, b_1 = \frac{7}{10}, b_2 = \frac{33}{10}, b_3 = -\frac{1}{2}, b_4 = -\frac{49}{10}, c_1 = -\frac{37}{10}, c_2 = \frac{1}{10}, c_3 = \frac{29}{10}, c_4 = -\frac{47}{10}, d_1 = \frac{19}{10}, d_2 = 5, d_3 = \frac{23}{10}, d_4 = -\frac{61231}{7010}$

11. $p = \frac{1127}{1402}, q = \frac{16}{51}, r = 0, s = \frac{43}{51}, a_1 = 0, a_2 = 2, a_3 = 4, a_4 = \frac{3}{5}, b_1 = -\frac{3}{10}, b_2 = \frac{27}{10}, b_3 = \frac{16}{5}, b_4 = -\frac{23}{5}, c_1 = -\frac{17}{5}, c_2 = -\frac{27}{10}, c_3 = -\frac{27}{10}, c_4 = -\frac{3}{2}, d_1 = -\frac{14}{5}, d_2 = -\frac{13}{10}, d_3 = -\frac{2}{5}, d_4 = -\frac{147478}{150715}$

12. $p = \frac{995}{1402}, q = 0, r = \frac{15}{17}, s = \frac{55}{102}, a_1 = -\frac{9}{2}, a_2 = -\frac{21}{10}, a_3 = -\frac{39}{10}, a_4 = \frac{7}{5}, b_1 = -\frac{13}{10}, b_2 = \frac{1}{2}, b_3 = \frac{23}{10}, b_4 = -\frac{41}{10}, c_1 = \frac{18}{5}, c_2 = -\frac{1}{2}, c_3 = -\frac{2}{5}, c_4 = -\frac{41}{10}, d_1 = \frac{16}{5}, d_2 = -\frac{39}{10}, d_3 = -\frac{3}{5}, d_4 = \frac{671729}{38555}$

13. $p = 0, q = 0, r = \frac{977}{1402}, s = 0, a_1 = -\frac{3}{5}, a_2 = \frac{3}{10}, a_3 = -\frac{21}{5}, a_4 = -\frac{23}{5}, b_1 = \frac{37}{10}, b_2 = -\frac{11}{10}, b_3 = -\frac{27}{10}, b_4 = \frac{1}{2}, c_1 = \frac{21}{5}, c_2 = -\frac{4}{5}, c_3 = \frac{29}{10}, c_4 = -\frac{47531}{9770}, d_1 = -\frac{7}{2}, d_2 = \frac{6}{5}, d_3 = -\frac{12}{5}, d_4 = \frac{23}{10}$

14. $p = 0, q = 0, r = 1, s = 1, a_1 = \frac{11}{5}, a_2 = \frac{21}{5}, a_3 = \frac{47}{10}, a_4 = -\frac{9}{10}, b_1 = -1, b_2 = -\frac{6}{5}, b_3 = -\frac{37}{10}, b_4 = -\frac{39}{10}, c_1 = \frac{41}{10}, c_2 = -\frac{8}{5}, c_3 = -\frac{6}{5}, c_4 = -\frac{7}{2}, d_1 = \frac{23}{10}, d_2 = -\frac{3}{5}, d_3 = -\frac{5}{2}, d_4 = 4$

The End

14 complex solutions to linear predictive policing

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 complex]solutions to linear predictive policing. The paper ends with "The End"

Introduction

In a previous paper, I've described linear predictive policing. In this paper, I describe 14 complex solutions to linear predictive policing.

14 complex solutions to linear predictive policing

1. $p = \frac{477}{701}, q = 1, r = 0, s = 0, a_1 = \frac{9}{5} + \frac{19i}{5}, a_2 = -\frac{31}{10} - \frac{29i}{10}, a_3 = \frac{3}{10} + 2i, a_4 = \frac{23}{5} - 3i, b_1 = \frac{2}{5} + \frac{17i}{5}, b_2 = -5 - \frac{19i}{10}, b_3 = -\frac{49}{10} + \frac{49i}{10}, b_4 = \frac{56433}{7010} - \frac{44387i}{7010}, c_1 = -3 + \frac{47i}{10}, c_2 = \frac{22}{5} + \frac{23i}{10}, c_3 = -\frac{7}{10} + \frac{8i}{5}, c_4 = -\frac{3}{2} - \frac{16i}{5}, d_1 = -2 - \frac{21i}{10}, d_2 = -\frac{7}{10} - \frac{11i}{5}, d_3 = \frac{3}{10} - \frac{17i}{5}, d_4 = 2 - \frac{3i}{5}$

2. $p = \frac{405}{1402}, q = 0, r = \frac{6}{17}, s = 1, a_1 = \frac{31}{10} + \frac{11i}{10}, a_2 = -\frac{7}{10} + 3i, a_3 = \frac{11}{5} - \frac{19i}{5}, a_4 = 3 + 3i, b_1 = \frac{47}{10} - \frac{33i}{10}, b_2 = \frac{1}{10} + \frac{3i}{5}, b_3 = -\frac{23}{10} + \frac{3i}{10}, b_4 = \frac{4}{5} + \frac{7i}{2}, c_1 = -\frac{3}{2} - \frac{24i}{5}, c_2 = -\frac{5}{2} - \frac{21i}{5}, c_3 = -\frac{43}{10} + \frac{37i}{10}, c_4 = -\frac{9}{10} + 3i, d_1 = -\frac{29}{10} - \frac{37i}{10}, d_2 = \frac{11}{10} + \frac{41i}{10}, d_3 = \frac{5}{2} - \frac{31i}{10}, d_4 = \frac{161073}{119170} + \frac{609789i}{238340}$

3. $p = \frac{11}{1402}, q = \frac{25}{102}, r = \frac{53}{102}, s = 1, a_1 = \frac{33}{10} - \frac{22i}{5}, a_2 = -\frac{17}{5} - \frac{11i}{5}, a_3 = \frac{39}{10} - \frac{49i}{10}, a_4 = -1 + \frac{23i}{10}, b_1 = -\frac{13}{5} + \frac{22i}{5}, b_2 = -\frac{17}{5} - \frac{9i}{10}, b_3 = -\frac{29}{10} + \frac{12i}{5}, b_4 = -\frac{47}{10} + \frac{i}{5}, c_1 = \frac{4}{5}, c_2 = -\frac{4}{5} - \frac{23i}{5}, c_3 = 2 - \frac{i}{5}, c_4 = \frac{24}{5} - \frac{22i}{5}, d_1 = \frac{5}{2} - \frac{6i}{5}, d_2 = \frac{3}{10} - \frac{4i}{5}, d_3 = -\frac{7}{2} + 3i, d_4 = \frac{10361}{7010} + \frac{561881i}{238340}$

4. $p = 0, q = \frac{540}{701}, r = 0, s = 0, a_1 = \frac{11}{5} + \frac{23i}{5}, a_2 = \frac{7}{10} + \frac{31i}{10}, a_3 = -\frac{27}{10} - \frac{37i}{10}, a_4 = \frac{19}{5} + \frac{43i}{10}, b_1 = \frac{1}{5} + \frac{49i}{10}, b_2 = -\frac{23}{5} - i, b_3 = \frac{14}{5} + \frac{22i}{5}, b_4 = \frac{313}{108} - \frac{83i}{10}, c_1 = \frac{9}{5} - \frac{43i}{10}, c_2 = \frac{37}{10} + \frac{27i}{10}, c_3 = -\frac{11}{10} + \frac{23i}{5}, c_4 = 1 + \frac{12i}{5}, d_1 = -\frac{43}{10}, d_2 = -\frac{13}{10} + \frac{2i}{5}, d_3 = \frac{3}{10} + \frac{i}{2}, d_4 = \frac{1}{2} + \frac{18i}{5}$

5. $p = 0, q = 1, r = 1, s = \frac{91}{102}, a_1 = -\frac{23}{5} + \frac{6i}{5}, a_2 = \frac{21}{10} + \frac{21i}{5}, a_3 = -\frac{9}{10} - \frac{21i}{10}, a_4 = -\frac{21}{10} - \frac{4i}{5}, b_1 = -\frac{23}{5} + \frac{27i}{10}, b_2 = \frac{43}{10} + \frac{7i}{10}, b_3 = -\frac{1}{10} - \frac{43i}{10}, b_4 = 4 + \frac{5i}{2}, c_1 = \frac{17}{5} + \frac{22i}{5}, c_2 = \frac{11}{5} + \frac{i}{2}, c_3 = \frac{7}{10} + \frac{3i}{5}, c_4 = \frac{19}{5} - \frac{47i}{10}, d_1 = -\frac{49}{10} + \frac{41i}{10}, d_2 = \frac{13}{10} - \frac{16i}{5}, d_3 = -\frac{41}{10} + \frac{37i}{10}, d_4 = -\frac{5947}{910} - \frac{3317i}{455}$

6. $p = \frac{277}{701}, q = \frac{11}{102}, r = 1, s = 1, a_1 = -\frac{19}{10} - \frac{37i}{10}, a_2 = \frac{22}{5} - 2i, a_3 = -1 + \frac{7i}{10}, a_4 = -\frac{21}{5} - \frac{4i}{5}, b_1 = \frac{4}{5} + \frac{21i}{5}, b_2 = -\frac{2}{5} - \frac{41i}{10}, b_3 = \frac{24}{5} + \frac{27i}{10}, b_4 = -\frac{7}{5} + i, c_1 = -\frac{31}{10} + \frac{27i}{10}, c_2 = -\frac{7}{2} - \frac{23i}{10}, c_3 = -\frac{1}{5} + \frac{18i}{5}, c_4 = \frac{17}{5} + \frac{3i}{10}, d_1 = \frac{13}{5} - \frac{11i}{5}, d_2 = \frac{3}{5} + \frac{11i}{5}, d_3 = -\frac{39}{10} - \frac{47i}{10}, d_4 = \frac{2058221}{357510} + \frac{815861i}{357510}$

7. $p = 0, q = 1, r = 1, s = 1, a_1 = -\frac{17}{5} - \frac{17i}{5}, a_2 = \frac{18}{5} - 4i, a_3 = \frac{4}{5} + \frac{49i}{10}, a_4 = -\frac{31}{10} + 5i, b_1 = \frac{9}{2} - \frac{7i}{10}, b_2 = \frac{6}{5} - \frac{16i}{5}, b_3 = \frac{33}{10} + \frac{24i}{5}, b_4 = -4 - \frac{31i}{10}, c_1 = -\frac{7}{10} - \frac{21i}{5}, c_2 = -4 - \frac{21i}{10}, c_3 = -5 + \frac{47i}{10}, c_4 = -\frac{18}{5} - \frac{23i}{10}, d_1 = \frac{9}{2} + \frac{21i}{10}, d_2 = \frac{2}{5} - \frac{39i}{10}, d_3 = \frac{19}{5} + \frac{3i}{2}, d_4 = \frac{3}{5} + \frac{32i}{5}$

8. $p = 0, q = \frac{273}{1402}, r = 1, s = 0, a_1 = \frac{2}{5} + \frac{7i}{10}, a_2 = \frac{21}{5} + \frac{41i}{10}, a_3 = -\frac{9}{5} - \frac{i}{10}, a_4 = \frac{31}{10} + \frac{21i}{10}, b_1 = \frac{23}{5} + \frac{41i}{10}, b_2 = \frac{5}{2} + \frac{21i}{10}, b_3 = \frac{7}{2} + \frac{3i}{10}, b_4 = -\frac{43}{10} - \frac{41i}{10}, c_1 = \frac{8}{5} + \frac{23i}{5}, c_2 = -\frac{1}{2} + \frac{3i}{10}, c_3 = \frac{8}{5} - \frac{16i}{5}, c_4 = -\frac{41033}{14020} - \frac{15193i}{7010}, d_1 = -\frac{9}{10} + \frac{31i}{10}, d_2 = -\frac{33}{10} - \frac{21i}{10}, d_3 = -\frac{13}{10} - \frac{39i}{10}, d_4 = -\frac{12}{5} - \frac{3i}{5}$

9. $p = \frac{277}{701}, q = \frac{11}{102}, r = 1, s = \frac{59}{102}, a_1 = -\frac{29}{10} + \frac{14i}{5}, a_2 = -\frac{27}{10} + i, a_3 = \frac{6}{5} - \frac{22i}{5}, a_4 = \frac{9}{5} + \frac{14i}{5}, b_1 = \frac{11}{5} - \frac{i}{10}, b_2 = -\frac{17}{10} + \frac{8i}{5}, b_3 = 4 + \frac{i}{10}, b_4 = -\frac{17}{5} - \frac{i}{5}, c_1 = \frac{24}{5} + \frac{18i}{5}, c_2 = 2 + \frac{27i}{10}, c_3 = \frac{31}{10} + \frac{17i}{5}, c_4 = -\frac{9}{10} - \frac{2i}{5}, d_1 = 1 - \frac{33i}{10}, d_2 = -\frac{21}{5} - i, d_3 = -\frac{31}{10} - \frac{16i}{5}, d_4 = -\frac{246476}{41359} - \frac{4277303i}{413590}$

10. $p = 0, q = \frac{775}{1402}, r = \frac{21}{34}, s = 0, a_1 = -\frac{23}{10} + \frac{13i}{10}, a_2 = -\frac{47}{10} + \frac{i}{10}, a_3 = -\frac{18}{5} - \frac{17i}{10}, a_4 = 4 - \frac{4i}{5}, b_1 = -\frac{39}{10} - \frac{14i}{5}, b_2 = -\frac{3}{5} - \frac{29i}{10}, b_3 = \frac{3}{5} + \frac{19i}{10}, b_4 = 5 + \frac{3i}{10}, c_1 = \frac{9}{10} - \frac{7i}{5}, c_2 = \frac{9}{5} - \frac{13i}{10}, c_3 = -\frac{21}{5} - \frac{33i}{10}, c_4 = \frac{4489}{2103} + \frac{38411i}{4206}, d_1 = -\frac{33}{10} + \frac{i}{2}, d_2 = \frac{13}{10} - \frac{3i}{2}, d_3 = -\frac{11}{10} - 5i, d_4 = -\frac{7}{5} - \frac{49i}{10}$

11. $p = \frac{90}{701}, q = 1, r = 1, s = 0, a_1 = \frac{7}{5} - \frac{24i}{5}, a_2 = -\frac{3}{5} - \frac{43i}{10}, a_3 = -\frac{29}{10} - \frac{i}{10}, a_4 = \frac{4}{5} - \frac{13i}{5}, b_1 = -\frac{43}{10} + \frac{18i}{5}, b_2 = -\frac{7}{5} + i, b_3 = \frac{21}{5} + \frac{21i}{10}, b_4 = -\frac{23}{10} + \frac{47i}{10}, c_1 = \frac{5}{2} - \frac{3i}{2}, c_2 = \frac{9}{2} + \frac{3i}{5}, c_3 = -\frac{47}{10} - \frac{29i}{10}, c_4 = \frac{3739}{1402} - \frac{21328i}{3505}, d_1 = -\frac{12}{5} + \frac{9i}{5}, d_2 = -\frac{2}{5} - \frac{21i}{5}, d_3 = -\frac{37}{10} + \frac{29i}{10}, d_4 = -1 - \frac{39i}{10}$

12. $p = \frac{1383}{1402}, q = \frac{73}{102}, r = \frac{29}{51}, s = 1, a_1 = -\frac{11}{10} + \frac{21i}{5}, a_2 = \frac{1}{10} + 2i, a_3 = \frac{11}{5} - \frac{3i}{2}, a_4 = -\frac{19}{5} - 2i, b_1 = \frac{13}{10} - \frac{41i}{10}, b_2 = \frac{14}{5} - \frac{29i}{10}, b_3 = -\frac{39}{10} + \frac{i}{2}, b_4 = \frac{4}{5} - \frac{3i}{5}, c_1 = \frac{39}{10} - \frac{39i}{10}, c_2 = -\frac{1}{10}(39i), c_3 = \frac{47}{10} - \frac{19i}{5}, c_4 = -\frac{9}{2} - \frac{13i}{5}, d_1 = \frac{23}{5} + \frac{4i}{5}, d_2 = -\frac{12}{5} - \frac{9i}{2}, d_3 = -\frac{23}{5} - 3i, d_4 = \frac{347703}{119170} + \frac{2048827i}{119170}$

13. $p = \frac{159}{1402}, q = 1, r = \frac{31}{34}, s = \frac{11}{51}, a_1 = -\frac{19}{5} - \frac{i}{5}, a_2 = \frac{4}{5} + \frac{3i}{10}, a_3 = -\frac{17}{5} + \frac{7i}{10}, a_4 = -\frac{9}{5} + \frac{21i}{5}, b_1 = \frac{8}{5} + \frac{12i}{5}, b_2 = -\frac{1}{10} + \frac{9i}{5}, b_3 = \frac{14}{5} + \frac{4i}{5}, b_4 = -\frac{33}{10} - \frac{9i}{10}, c_1 = -\frac{33}{10} + \frac{7i}{2}, c_2 = \frac{7}{10} + \frac{16i}{5}, c_3 = -\frac{49}{10} + \frac{33i}{10}, c_4 = \frac{13}{5} + \frac{2i}{5}, d_1 = \frac{21}{5} + \frac{7i}{5}, d_2 = \frac{13}{10} - \frac{13i}{5}, d_3 = -\frac{5}{2} - 2i, d_4 = \frac{679347}{30844} - \frac{481180i}{7711}$

14. $p = \frac{140}{701}, q = \frac{14}{17}, r = \frac{23}{51}, s = 1, a_1 = \frac{18}{5} - \frac{7i}{2}, a_2 = -\frac{18}{5} - \frac{14i}{5}, a_3 = -\frac{24}{5} - i, a_4 = \frac{3}{10} - \frac{8i}{5}, b_1 = \frac{7}{5} - \frac{i}{5}, b_2 = -\frac{41}{10} + \frac{i}{5}, b_3 = -\frac{21}{5} + \frac{24i}{5}, b_4 = \frac{43}{10} - \frac{29i}{10}, c_1 = -\frac{29}{10} + \frac{4i}{5}, c_2 = \frac{16}{5} - 2i, c_3 = -\frac{31}{10} + \frac{17i}{10}, c_4 = \frac{3}{5} - \frac{49i}{10}, d_1 = -\frac{13}{5} - \frac{16i}{5}, d_2 = -\frac{39}{10} + \frac{9i}{10}, d_3 = 1 - \frac{3i}{5}, d_4 = \frac{221489}{21030} + \frac{1822253i}{357510}$

The End

Probabilistic predictive policing with the normal distribution

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe probabilistic predictive policing . The paper ends with "The End"

Introduction

In a previous paper, I've described predictive policing. In this paper, I describe probabilistic predictive policing with the normal distribution.

Probabilistic predictive policing with the normal distribution

The equations of probabilistic predictive policing with the normal distribution are

$$p(t) = \frac{e^{-\frac{t-\mu_p}{2\sigma_p^2}^2}}{\sqrt{2\pi}\sigma_p}$$

$$q(t) = \frac{e^{-\frac{t-\mu_q}{2\sigma_q^2}^2}}{\sqrt{2\pi}\sigma_q}$$

$$r(t) = \frac{e^{-\frac{t-\mu_r}{2\sigma_r^2}^2}}{\sqrt{2\pi}\sigma_r}$$

$$s(t) = \frac{e^{-\frac{t-\mu_s}{2\sigma_s^2}^2}}{\sqrt{2\pi}\sigma_s}$$

where

$$p(t) + q(t) = 1 - r(t) - s(t)$$

General solution to probabilistic predictive policing with the normal distribution

The general solution to probabilistic predictive policing with the normal distribution is

$$t = \mu_p - \sqrt{2\log(2)\sigma_p^2 + \log(\frac{2}{\pi})\sigma_p^2 - 2\sigma_p^2\log(\sigma_p)}$$

and

$$t = \mu_p + \sqrt{2\log(2)\sigma_p^2 + \log(\frac{2}{\pi})\sigma_p^2 - 2\sigma_p^2\log(\sigma_p)}\}\}$$

The End

14 real solutions to probabilistic predictive policing with the normal distribution

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 real solutions to probabilistic predictive policing with the normal distribution. The paper ends with "The End"

Introduction

In a previous paper, I've described probabilistic predictive policing with the normal distribution. In this paper, I describe 14 real solutions to probabilistic predictive policing with the normal distribution.

14 real solutions to probabilistic predictive policing with the normal distribution

1. $\mu_p = -\frac{17}{10}, \sigma_p = \frac{674}{439}, \mu_q = -\frac{11}{10}, \sigma_q = \frac{49}{10}, \mu_r = \frac{5}{2}, \sigma_r = -\frac{29}{10}, \mu_s = \frac{27}{10}, \sigma_s = -\frac{4}{5}, t = \frac{6740\sqrt{2\log(\frac{439\sqrt{\frac{2}{\pi}}}{337})}-7463}{4390}$
2. $\mu_p = \frac{517}{10}, \sigma_p = 2\sqrt{\frac{2}{\pi}}, \mu_q = -\frac{9}{5}, \sigma_q = \frac{9}{10}, \mu_r = \frac{7}{2}, \sigma_r = \frac{21}{5}, \mu_s = -\frac{1}{5}, \sigma_s = \frac{29}{10}, t = \frac{517}{10}$
3. $\mu_p = \frac{39}{10}, \sigma_p = \frac{294}{439}, \mu_q = \frac{41}{10}, \sigma_q = -\frac{3}{5}, \mu_r = -\frac{9}{2}, \sigma_r = -\frac{31}{10}, \mu_s = \frac{22}{5}, \sigma_s = -\frac{1}{2}, t = -\frac{3(980\sqrt{2\log(\frac{439\sqrt{\frac{2}{\pi}}}{147})}-5707)}{4390}$
4. $\mu_p = -\frac{49}{10}, \sigma_p = \frac{561}{878}, \mu_q = -\frac{12}{5}, \sigma_q = -\frac{8}{5}, \mu_r = -2, \sigma_r = \frac{1}{2}, \mu_s = \frac{21}{10}, \sigma_s = \frac{41}{10}, t = \frac{-2805\sqrt{2\log(\frac{1756\sqrt{\frac{2}{\pi}}}{561})}-21511}{4390}$
5. $\mu_p = \frac{169}{5}, \sigma_p = 2\sqrt{\frac{2}{\pi}}, \mu_q = \frac{9}{2}, \sigma_q = \frac{21}{10}, \mu_r = -\frac{1}{2}, \sigma_r = -1, \mu_s = \frac{47}{10}, \sigma_s = 4, t = \frac{169}{5}$
6. $\mu_p = \frac{39}{10}, \sigma_p = \frac{1037}{878}, \mu_q = -\frac{23}{5}, \sigma_q = -\frac{7}{5}, \mu_r = \frac{3}{2}, \sigma_r = -\frac{12}{5}, \mu_s = -\frac{4}{5}, \sigma_s = 0, t = \frac{17121-5185\sqrt{2\log(\frac{1756\sqrt{\frac{2}{\pi}}}{1037})}}{4390}$
7. $\mu_p = \frac{49}{10}, \sigma_p = \frac{55}{439}, \mu_q = -\frac{23}{5}, \sigma_q = \frac{8}{5}, \mu_r = -\frac{4}{5}, \sigma_r = -\frac{31}{10}, \mu_s = \frac{23}{5}, \sigma_s = \frac{17}{5}, t = \frac{21511-550\sqrt{2\log(\frac{878\sqrt{\frac{2}{\pi}}}{55})}}{4390}$

8. $\mu_p = -5, \sigma_p = \frac{679}{878}, \mu_q = -\frac{14}{5}, \sigma_q = -\frac{5}{2}, \mu_r = -\frac{5}{2}, \sigma_r = -\frac{7}{5}, \mu_s = -\frac{17}{5}, \sigma_s = -\frac{7}{2}, t = \frac{1}{878}(-679\sqrt{2\log(\frac{1756\sqrt{\frac{2}{\pi}}}{679})} - 4390)$

9. $\mu_p = -\frac{11}{10}, \sigma_p = \frac{346}{439}, \mu_q = \frac{4}{5}, \sigma_q = \frac{3}{10}, \mu_r = -\frac{9}{10}, \sigma_r = \frac{6}{5}, \mu_s = \frac{27}{10}, \sigma_s = -\frac{16}{5}, t = \frac{-3460\sqrt{2\log(\frac{439\sqrt{\frac{2}{\pi}}}{173})} - 4829}{4390}$

10. $\mu_p = \frac{273}{5}, \sigma_p = 2\sqrt{\frac{2}{\pi}}, \mu_q = \frac{49}{10}, \sigma_q = \frac{33}{10}, \mu_r = \frac{24}{5}, \sigma_r = -\frac{21}{10}, \mu_s = \frac{7}{5}, \sigma_s = \frac{11}{5}, t = \frac{273}{5}$

11. $\mu_p = \frac{81}{10}, \sigma_p = 2\sqrt{\frac{2}{\pi}}, \mu_q = \frac{24}{5}, \sigma_q = \frac{39}{10}, \mu_r = \frac{29}{10}, \sigma_r = \frac{3}{5}, \mu_s = 3, \sigma_s = \frac{16}{5}, t = \frac{81}{10}$

12. $\mu_p = 2, \sigma_p = \frac{143}{878}, \mu_q = -\frac{29}{10}, \sigma_q = -3, \mu_r = \frac{5}{2}, \sigma_r = \frac{8}{5}, \mu_s = -\frac{37}{10}, \sigma_s = -\frac{33}{10}, t = \frac{1}{878}(143\sqrt{2\log(\frac{1756\sqrt{\frac{2}{\pi}}}{143})} + 1756)$

13. $\mu_p = \frac{1}{10}, \sigma_p = \frac{198}{439}, \mu_q = \frac{4}{5}, \sigma_q = -\frac{47}{10}, \mu_r = \frac{14}{5}, \sigma_r = \frac{9}{10}, \mu_s = -\frac{1}{5}, \sigma_s = -\frac{7}{2}, t = \frac{1980\sqrt{2\log(\frac{439\sqrt{\frac{2}{\pi}}}{99})} + 439}{4390}$

14. $\mu_p = \frac{12}{5}, \sigma_p = \frac{359}{878}, \mu_q = -\frac{41}{10}, \sigma_q = -\frac{43}{10}, \mu_r = -\frac{21}{10}, \sigma_r = -\frac{4}{5}, \mu_s = -\frac{2}{5}, \sigma_s = -\frac{13}{10}, t = \frac{1795\sqrt{2\log(\frac{1756\sqrt{\frac{2}{\pi}}}{359})} + 10536}{4390}$

The End