

**OOT 2016: “Waiting for Goldman”**  
**Packet 9 (Editors 3)**

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1. This man considered each atom in a lattice as an independent harmonic oscillator in a theory which predicted an exponential dependence of heat capacity on temperature at low temperatures. One minus half the number of dimensions multiplied by the trace of the Ricci tensor gives the trace of this man’s namesake tensor. The probabilities of stimulated emission and spontaneous emission are governed by two coefficients named for this man. One of his theories was tested in the Pound-Rebka experiment and predicted the anomalous precession of Mercury’s perihelion. For 10 points, name this formulator of the theories of General and Special Relativity.

ANSWER: Albert Einstein

2. The arrival of a eunuch in one novel by this author is telegraphed by the jangling of golden bells at the base of his robe. Lydia Davis was criticised for saying she didn’t like the only novel by this author that she translated. One novel by this author concerns the theft of a sacred veil from the temple of Tanit. The title character of another novel by this author of *Salammbô* builds a huge debt to the textile salesman L’heureux and is married to a doctor who carries out a failed surgery on the clubfooted Hippolyte. For 10 points name this author of a novel about the wife of Charles, *Madame Bovary*.

ANSWER: Gustave Flaubert

3. This thinker developed three validity dimensions from which rationality can potentially be derived: normative rightness, theoretical truth and expressive or subjective truthfulness and discussed how the lifeworld becomes colonized by the System. This thinker discussed modern faith in *The Dialectics of Secularization*, a dialogue with Joseph Ratzinger. This thinker described the shift in the face-to-face critique of authorities in places like coffeehouses into the modern social welfare state. For 10 points, name this author of *The Theory of Communicative Action* and *The Structural Transformation of the Public Sphere*.

ANSWER: Jürgen Habermas

4. This thinker attacked Antonio Diana’s defence of duels in one work and Leon Brunschvig and Philippe Sellier have both created systems for organising another of his works. This thinker frequently contrasted the thought of Epictetus and Montaigne and experienced a “night of fire.” He argued that all reasoning becomes reduced to sentiment and that it is the heart which feels God rather than reasoning in a work in which he famously contrasts finite losses with infinite potential gains. For 10 points name this French philosopher who argued that belief in God was a bet worth making in his *Pensees*.

ANSWER: Blaise Pascal

5. Marina Warner’s *Indigo* is an adaptation of this work and Shelley was inspired by this play in writing “With A Guitar, To Jane”. A postcolonial adaptation of this work in which two characters are reworked as a mulatto and a black slave was written by Aime Césaire. W. H. Auden wrote a poetic commentary on this play set after the main action. That poem is “The Sea and the Mirror” and Robert Browning wrote a poem about one of this play’s character’s reflections on Setebos, a god worshiped by his mother Sycorax. For 10 points name this play whose character of Caliban has been the subject of numerous reinterpretations.

ANSWER: *The* Tempest

6. In India, Babylonia and Egypt this material was used alongside frankincense as a burnt offering in temples. Notable finds made from this material include a lion’s head from Qatna in Syria, and it is embedded in the pectoral of Tutankhamun. Beads of this material were notable in both the shaft graves of Mycenae, and the cupola tombs of Crete. A room constructed from this material was taken from the Catherine Palace during World War II. The major trading route in antiquity was from the Baltic coastline down to the Adriatic. For 10 points, name this material formed from fossilized tree resin.

ANSWER: Amber

7. Kinesin-2 powers movement of protein complexes within these structures in IFT. Spirochetes are unique among bacterial phyla since they have endocellular examples of these structures. The *Mot* protein complex causes these structures to rotate. In prokaryotes these structures contain a universal joint called a “hook” and a chiral filament. Eukaryotic examples of these structures, which are bound to basal bodies, contain a [9+2] arrangement of microtubules. These structures are longer than cilia. For 10 points, name these structures used for cell motion by *H.pylori*, *E.coli* and spermatozoa.

ANSWER: **Flagella** (accept **Flagellum**)

8. The book of Ezekiel claims that the sin of this place and its daughters was “pride, fullness of bread, and abundance of idleness”; while in the Gospel of Matthew, Jesus states that if the works done in Capernaum had been done in this place, it would have escaped its fate. In the book of Genesis, God promises Abraham that he will not destroy this city if he can find 10 good people in it and the wife of one inhabitant of this city looks back on its destruction only to be turned into a pillar of salt. For 10 points, name this city where Lot lived before it was destroyed along with Gomorrah.

ANSWER: **Sodom**

9. Carl Maria von Weber contrasted this key with C minor to represent good and evil in the overture to *Der Freischutz*. A symphonic piece which drew heavily on Gounod’s Symphony in D was written in this key, as was its composer’s only other symphony “Roma”. Sibelius’s final one movement symphony was written in this key. Famous pieces in this key include Beethoven’s “Waldstein” piano sonata and Mozart’s “Jupiter” symphony. Schubert’s 6th and 9th symphonies were the “little” and “great” ones of this key which was also used for Mozart’s “Sonata Facile”. It’s relative minor being A minor, for 10 points identify this key with no sharps or flats.

ANSWER: **C** major

10. A portion of this work explores why a certain figure is hailed as the greatest in his line of work in an ode of Tennyson when Wellington was not so described. Illuminated clouds are compared with “the fleece of the Lamb of God” at a climactic moment in this novel that prompts a Purser and a Surgeon to discuss the relationship between free will and muscle spasm. The title character of this work is repeatedly told, “Jimmy Legs is down on you...” by the supportive Old Dansker and his last words are “God Bless Captain Vere!”. The HMS *Bellipotent* is the site of the death of Claggart at the hands of the title character of what Melville novella that was turned into an opera by Benjamin Britten.

ANSWER: **Billy Budd**

11. During the Great War, one royal with this given name created a society to provide Swedish troops with suitable underwear. John Balliol [bailie-o] attempted to seize the Scottish crown from a disputed monarch with this given name; that monarch with this name died on Orkney at the age of seven. A queen consort with this name spearheaded religious reforms in the court of Malcolm Canmore and a Countess of Snowdon with this name was forced to terminate her romance with Group Captain Peter Townsend to remain in the line of succession. For 10 points, give this name shared by “the Pearl of Scotland”, “the Maid of Norway”, and Elizabeth II’s younger sister.

ANSWER: **Margaret** (accept obvious variants)

12. Along with Huang Kun, this person names an approximation that the representation matrix of the nuclear kinetic energy operator is diagonal. A repulsion term containing a constant determined by a sample’s compressibility appears in an equation for predicting lattice energies named for this scientist and Mayer. He considered the square of the wavefunction as a probability density function in a model also known as the Copenhagen interpretation. Nuclei are considered to be stationary on the timescale of electronic movement in an approximation named for, for 10 points, which German physicist and Oppenheimer?

ANSWER: Max **Born**

13. This person intended to produce a Mass and Symphony in the wake of the Holocaust but channelled those efforts into his *Rhythm Futur*. This person played with Mary Deutsch and performed two nights at the Carnegie Hall while on tour with Duke Ellington in 1946. This person co-composed *Minor Swing* with the violinist, Stephane Grappelli with whom he had formed the Quintet of the Hot Club of France and this guitarist's unique fingering was the result of his having only three operational fingers on his left hand. For 10 points, name this Franco-Belgian Romani jazz guitarist.

ANSWER: Django **Reinhardt**

14. The Royal Navy training school, H.M.S. Conway, ran aground in this body of water in 1953. Fears over the American War of Independence led M.P. Peter Wynne to build a castle at the western end of this body of water, Fort Belan. Fire destroyed the tubular construction of a railway bridge over this body of water after which that bridge over this body of water was rebuilt to carry both road and rail traffic. An earlier road bridge over this location was designed by Thomas Telford to prevent ferry wrecks in the Swellies. Traversed by the Britannia Bridge, for 10 points, name this body of water separating mainland Wales from Anglesey.

ANSWER: **Menai** Strait OR Afon **Menai**

15. This person described a boy's protestations as a "Big, bull-necked Minister of Calvin's God" throws a dog to its death in a work which riffs on an anecdote by Ebenezer Jones. In one poem by this man, a woman asks God to guide the "gallant blacks" of Jamaica, Honduras, and Togoland "And, even more, protect the whites" as she prays in the title location. In another poem, this Poet Laureate describes "tinned minds, tinned breath" as he asks "friendly bombs" to fall on the titular Berkshire town. For 10 points, name this English poet, preservationist, and broadcaster: author of *In Westminster Abbey* and *Slough*.

ANSWER: John **Betjeman**

16. In one work by this artist, a military officer and his lover both dressed in blue stand among crashing waves. In another work by this person, a silhouette is seen in the background while a bearded man stares horrified, cradling the bloodied head of his dead son. This artist depicted a composer slouching in a dressing gown in a posthumous portrait of Glinka. In another work by this artist, a steamship is seen in the background as a young man begins to remove his yoke while part of a barge-hauling crew. For 10 points, name this Russian realist painter of *Ivan the Terrible and his son Ivan* and *Barge Haulers on the Volga*.

ANSWER: Ilya Yefimovich **Repin**

17. While working for this organisation, Isobel Gunn passed as a man to circumvent this organisation's ban on employing European women. This organisation's main post was formerly at York Factory and its current logo features the multi-coloured stripes which are used on its namesake point blanket. In 1670, this company was given charter over an area of North America named for this company's first Governor, Rupert of the Rhine and in 1991 this company ceased dealing in its former staple commodity, fur. For 10 points, name this retailer named for a Canadian body of water whose basin it once owned.

ANSWER: **Hudson's Bay Company** (accept **La Baie** and, reluctantly, **Hudson Bay Company**)

18. At the age of 21, this person produced the Oscar-winning comedy, *Two Arabian Knights*. Shortly before the 1960 U.S. Presidential election, Richard Nixon discovered that this person had loaned his brother Donald \$205,000. This person designed a cantilevered bra for Jane Russell after becoming obsessed with her nipples during the production of *The Outlaw*. Three aviators died during the making of this person's film *Hell's Angels* and this person's Hercules H4 aircraft, the largest built at the time, flew only a mile and was nicknamed the "Spruce Goose". For 10 points, name this somewhat eccentric U.S. tycoon, filmmaker, and aviator.

ANSWER: Howard Robard **Hughes, Jr.**

19. In one of this director's films, Alex Jones appears shouting into a megaphone projected from a speaker on top of his car. Two characters in that rotoscoped film by this director who discuss the possibility of dream consciousness after bodily death, while lying in bed, originally appeared in another film by this director; in that film by this director they meet on a train and spend the night walking around Vienna. This director of *Waking Life* and *Before Sunrise* more recently released a project filmed over twelve years that starred Ellar Coltrane. For 10 points, identify this director of *Boyhood*.

ANSWER: Richard Linklater [JG]

20. BAPTA is a specific chelator of this element used in biological research. L-type and T-type are voltage activated ion channels which principally carry this element. Those L-type channels lead to the first step of this element's self-induced release from intracellular stores during excitation-contraction coupling in myocytes. Parathyroid hormone raises the concentration of this element's divalent ion in the blood. Kidney stones are usually formed of this element's oxalate salt. Ninety-nine percent of the body's stores of this element are found in a collagenous matrix as hydroxyapatite. For 10 points, name this element principally found in teeth and bones.

ANSWER: Calcium

#### Spare/Tiebreaker

21. This singer once said "I'm never getting too lonely because it's the kind of disease where you might sit in front of the TV with three bags of biscuits, rather than communicate with the world." This woman was at the centre of the leading case on misrepresentation by conduct after she left her most famous group. This woman had a number ones from her album *Schizophonic* with "Bag It Up" as well "Mi Chico Latino" and recently married Red Bull supremo Christian Horner. Her biggest solo contains the lyrics "I'm gonna go out/ I'm gonna let myself get/ absolutely soaking wet" and was a cover of a song by the Weather Girls. For 10 points name this member of the Spice Girls perhaps most famous for wearing a very short Union Jack dress and having red hair.

ANSWER: Geri Halliwell

#### Bonuses

1. This author wrote that: "You will find in [this handbook] a mirror in which you can without hesitation contemplate the health of your soul, so that you may be pleasing not only in this world, but to him who formed you out of dust." For 10 points each:

[10] Name this author who wrote the *Liber Manualis* as a guide for her son William from whom she was separated. She was notably not a nun.

ANSWER: Dhuoda

[10] Dhuoda makes many references in the *Liber Manualis* to this York-born scholar who likely wrote the book of Maths riddles, *Problems to Sharpen Youths*, and who oversaw the palace school in Aachen.

ANSWER: Alcuin (accept Flaccus or Albinus or Ealhwine)

[10] Alcuin was patronized by this Carolingian King who he often referred to as David. He was crowned on Christmas Day 800.

ANSWER: Charlemagne

2. Identify some authors noted for their criticisms of colonialism, for 10 points each.

[10] This pseudonymous Dutch author is best known for his novel *Max Havelaar*, in which the title character fights the corrupt Cultivation System in Dutch occupied Java.

ANSWER: Multatuli [prompt on Eduard Dekker]

[10] This Kenyan author of *Petals of Blood* and *A Grain of Wheat* abandoned the English language and returned to writing in his native Kikuyu, producing novels like *The Wizard of the Crow*.

ANSWER: Ngugi wa Thiong'o

[10] This author called out Conrad's *Heart of Darkness* in the essay "An Image of Africa", though he is perhaps better known for *Things Fall Apart*.

ANSWER: Chinua Achebe

3. For 10 points each, name some British illustrators.

[10] This illustrator was head cartoonist of *Punch* from 1861 and became the first cartoonist to be knighted. He is probably best remembered for his illustrations of the works of Lewis Carroll.

ANSWER: John Tenniel

[10] Tenniel's illustrations have often led to this Carroll protagonist being shown with blond hair in subsequent depictions despite her real life basis having brown hair.

ANSWER: Alice

[10] This artist illustrated the 1907 edition of *Alice's Adventures in Wonderland*. His distinct pen and ink drawings were also used to illustrate Aesop's Fables and the myths of Ring Cycle.

ANSWER: Arthur **Rackham**

4. Answer some questions about a grumpy and drunken American author, for 10 points each.

[10] Identify this novelist and short story writer of "Hills Like White Elephants" and *A Farewell to Arms*.

ANSWER: Ernest **Hemingway**

[10] This Hemingway short story takes place in a convent hospital. The second of three title characters hires a Mexican band to play music to soothe the first title character, Cayetano.

ANSWER: "The **Gambler, the Nun, and the Radio**"

[10] The title character of this story is shot dead by his wife Margot who, it turns out, had been sleeping with their hunting guide, Robert Wilson.

ANSWER: "The **Short Happy Life of Francis Macomber**"

5. Name some things about Darlings, for 10 points each:

[10] Name both of the Darling boys who were taken with Wendy to Neverland by Peter Pan.

ANSWER: **John** and **Michael** (both needed)

[10] "Simply says: Bigger" is the final entry in the diary of Captain Kevin Darling, who was played by this actor in *Blackadder Goes Forth*.

ANSWER: Tim **McInnerny**

[10] The Darling River joins with the Murray at Wentworth in this Australian province, whose Super Rugby team is the Waratahs.

ANSWER: **New South Wales** (accept **NSW**)

6. This man was a member of the dining circle which Benjamin Franklin dubbed the "Club of Honest Whigs" and was involved in the French Revolution controversy, for 10 points each:

[10] The controversy kicked off in response to this preacher's incendiary pamphlet *A Discourse on the Love of Our Country*.

ANSWER: Richard **Price**

[10] The first major response to Price's pamphlet was this cornerstone conservative text written by leading Old Whig Edmund Burke.

ANSWER: **Reflections on the Revolution in France** [prompt on partial answers]

[10] This thinker wrote his book *Rights of Man* as an attack on Burke's *Reflections*. He also wrote the pamphlet *Common Sense*.

ANSWER: Thomas **Paine**

7. This organ implants into the myometrium and is low-lying in its namesake "praevia". For 10 points each:

[10] Name this organ that connects the mother's circulation to that of a foetus.

ANSWER: **Placenta**

[10] This potentially life-threatening disease of pregnancy is characterised by rocketing blood pressures and protein in the urine. It is caused by poor placental function.

ANSWER: **Pre-Eclampsia** [or **PET** or **toxaemia of pregnancy** if by chance we're in the 1800's]

[10] In this form of pregnancy, placenta-like tissue is formed from a non-viable product of conception such as a sperm fertilising an egg with no DNA or two sperm fertilising a single egg.

ANSWER: Hydatidiform **Mole** [or **Molar** pregnancy, accept **Gestational Trophoblastic Disease**]

8. He wrote the Restoration comedy *The Relapse* as well as spending some time in the Bastille. For 10 points each:

[10] Name this English Baroque architect who designed Seaton Delaval Hall and Blenheim Palace.

ANSWER: John **Vanbrugh**

[10] Vanbrugh designed this stately home outside York, notable for its appearance as Brideshead in two adaptations of that work.

ANSWER: **Castle Howard**

[10] This landscape gardener laid out the park at Blenheim, one of many he created in the “English Style” of seemingly natural rolling parkland with groves.

ANSWER: Lancelot “Capability” **Brown**

9. This author who writes in German won the Nobel Prize for Literature in 2009. For 10 points each:

[10] Identify this author of a novel about a woman accused by the Securitate of sewing notes into men’s suits, *The Appointment*. She also wrote *The Hunger Angel*.

ANSWER: Herta **Müller**

[10] Though she writes in German, Herta Müller was born in this country, which was also the birthplace of Eugene Ionesco.

ANSWER: **Romania**

[10] This Romanian pessimistic aphorist is best known for his essay collection *A Short History of Decay*.

ANSWER: Emil **Cioran**

10. This Marxist historian’s wrote the posthumously published *Fractured Times*. For 10 points each:

[10] Identify this thinker who co-edited with T.O. Ranger the volume *The Invention of Tradition*. He is better known for his trilogy comprising *The Age of Revolution*, *The Age of Capital* and *The Age of Empire*.

ANSWER: Eric **Hobsbawm**

[10] Hobsbawm’s trilogy spans the “long” version of this time period, during which the year of revolutions fell.

ANSWER: **19<sup>th</sup> Century** AD

[10] Hobsbawm introduced this term as part of his thesis that outlaws and other people who live by crime were often seen as beacons of resistance, such as Robin Hood and Pancho Villa.

ANSWER: **Social Bandits**

11. Answer some questions about chemicals that make you smell of garlic. For 10 points each:

[10] This high-boiling solvent is used in PCR to inhibit the formation of secondary structures in the template and primers. It reacts with oxalyl chloride in the Swern oxidation.

ANSWER: **DMSO** (accept **Dimethyl Sulfoxide**)

[10] This chalcogen element with symbol Te is often used alongside Cadmium and mercury in solar panels, and its dimethyl form has a garlic like odour.

ANSWER: **Tellurium**

[10] The thiosulfinate allicin, which gives garlic its smell, is chiral, but naturally forms as this kind of mixture, with equal amounts of left and right handed enantiomers making it optically inactive.

ANSWER: **Racemate** (accept **Racemic** mixture)

12. This Marxist geographer used the idea of accumulation by dispossession to explain how neoliberal policies allow for a small number of people to accumulate enormous wealth. For 10 points each:

[10] Identify this political economist of *A Brief History of Neoliberalism* who produced a popular set of video lectures about his interpretation of Marx.

ANSWER: David **Harvey**

[10] David Harvey wrote *The Right to this sort of location*. Darran Anderson wrote a book titled for *Imaginary* examples of these locations. Walter Benjamin’s *Arcades Project* concerned the observations of a *flâneur* strolling through one of these places.

ANSWER: **City** [accept word forms]

[10] David Harvey wrote *The Enigma of this concept*, which is the title of a multivolume but nevertheless incomplete work by Karl Marx.

ANSWER: **Capital**

13. Due to the intense radiation and magnetic fields of its final environment, the main camera on this spacecraft is expected to only last 7 orbits. Name, for 10 points:

[10] This probe, with its core protected by a titanium vault, is the most distant ever built to use solar panels rather than radioactivity for power.

ANSWER: **Juno**

[10] From June 2016, Juno will investigate this planet, which was last studied by the Galileo probe. It was destroyed by plunging into the dense atmosphere of this largest gas giant.

ANSWER: **Jupiter**

[10] This icy moon of Jupiter will be investigated by the “Clipper” spacecraft, which might include a lander to investigate the crevasses and possible subglacial sea.

ANSWER: **Europa**

14. He is typically depicted holding an axe and a lotus and he won a race against his brother, Karthikeya. For 10 points each:

[10] Name this “remover of obstacles” who has the head of an elephant.

ANSWER: **Ganesha**

[10] Ganesha is also notable for having a large appetite often devotionally appeased with this, his favourite food. At Ganesha Chaturthi 21 of these are offered and he is frequently seen holding this sort of food.

ANSWER: **Modak** or **Ladoo**

[10] One of the centres of the worship of Ganesha is this Maharashtran city around which people conduct the Ashtavinayaka pilgrimage by visiting eight holy temples with different idols.

ANSWER: **Pune**

15. This philosopher caused a stir with the recent publication of his book *Mind and Cosmos*. For 10 points each:

[10] Identify this contemporary philosopher who wrote the article “What Is it Like to Be a Bat?”

ANSWER: Thomas **Nagel**

[10] Nagel’s book *Mind and Cosmos* was targeted at the conception of the world grounded in a school of thought named for this naturalist. This naturalist’s *Dangerous Idea*, evolution, inspired another contemporary philosopher.

ANSWER: Charles **Darwin**

[10] *Darwin’s Dangerous Idea* is a book by this philosopher who distanced himself from the New Atheist movement with a scathing critique of Sam Harris. His philosophical work focuses on the hard problem of consciousness and he denies the existence of qualia.

ANSWER: Daniel **Dennett**

16. ANSWER some questions about the structure of baroque music, for 10 points each:

[10] This form was characterised by small episodes which were repeated partially throughout the work, before a full repeat at the end.

ANSWER: **Ritornello** form

[10] This Veronan composer used ritornello form for all 12 of his opus 8 three movement concerti grossi and led the Margrave of Brandenburg’s orchestra from 1677-1679.

ANSWER: Giuseppe **Torelli**

[10] The Ritornello form was later superseded by this form used for the first movement of most symphonies, it is characterised by its exposition, development, recapitulation structure.

ANSWER: **Sonata** form

17. This poet claimed that poets were “the unacknowledged legislators of the world” in his “A Defence of Poetry”. For 10 points each:

[10] Identify this Romantic poet of “To a Skylark” and “Ozymandias”.

ANSWER: Percy Bysshe **Shelley**

[10] This Shelley closet drama riffs on a play by Aeschylus. The title character of this play is in love with Asia and this play opens with that character surrounded by Ione and Panthea.

ANSWER: **Prometheus Unbound**

[10] This Shelley poem was originally published as *Laon and Cythna*. Mary Shelley wrote that the aged man that rescues Laon from prison in this poem was modelled on Doctor Lind, who had supported Shelley in his time at Eton.

ANSWER: **The Revolt of Islam**

18. Isabella II of Spain’s Prime Minister, Leopoldo O’Donnell, was the 1<sup>st</sup> Duke of Tetuan, a city in the north of this modern day country. For 10 points each:

[10] Identify this country in which ‘Abd al-Karim led a failed revolt against the occupying Spanish in the 1920s.

ANSWER: **Morocco**

[10] ‘Abd al-Karim’s revolt is often named for this region of Morocco. Controversy over the war in this region led to a coup against Miguel Primo de Rivera.

ANSWER: **Rif**

[10] This modern day member of the Socialist International is a Sahrawi rebel group seeking to drive Morocco out of the Western Sahara.

ANSWER: **Polisario Front**

19. Wootton Bassett was the most recent town in Britain to be granted a royal prefix. For 10 points each name:

[10] This Kentish town was granted its prefix by Edward VII, and it is infamous for being the home of the fictional letter-writer “Disgusted”.

ANSWER: **Royal Tunbridge Wells**

[10] This pair of Scottish villages sits in the shadow of the Forth Road and Rail Bridges, and were built to provide a service for pilgrims to St Andrews.

ANSWER: (North and South) **Queensferry**

[10] This town is known for its Ammonite Pavement, as well as appearances in literature such as *The French Lieutenant’s Woman* and *Persuasion*.

ANSWER: **Lyme Regis**

20. They generate magnetic fields described by the Biot-Savart law. For 10 Points Each:

[10] Name this quantity, which according to Ohm’s law is equal to voltage over Resistance.

ANSWER: Electric **Current**

[10] Current can be measured by transducers looking for this effect, the production of a potential difference over an electrical conductor transverse to the current.

ANSWER: **Hall** Effect

[10] In a plasma, the Hall parameter is equal to this quantity over collision frequency.

ANSWER: **Radius of Gyration** (accept **gyrofrequency**)