How to Give a Good Talk?

Arnaud Legout

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INRIA, Sophia Antipolis
EPI Planète

Email: arnaud.legout@inria.fr

cel-00529505, version 6
October 2013

Why?

Presentations are a fundamental part of research excellence

Research and Marketing

- The best researchers in the world learned how to sell their work
  - To the community: visibility, impact
  - To students: attract graduate students
  - To commissions: funding, promotion
  - To the public: increase attraction of your field, fame

Goals of a Presentation

- ❑ Give the audience the intuition of your idea
- ❑ Make the audience eager
  - To read your paper
  - To ask you questions
  - To discuss with you
- ❑ Build relationship
- ❑ Create a reputation
- ❑ Get feedback

Goals of a Presentation

- Show you can make great presentations
  - Big plus in a career
  - Conversely, a poor presentation can kill an application to a new position

Each talk is an interview talk

Can You Trust Me?

- Make your own opinion
  - Attend/watch presentations
  - Mimic presentations you understand/like
    - Big plus if it is not your field
- Never ever consider simplicity and clarity as a proof of weakness: this is talent
- You can violate the rules if you have a very good reason to do so

Focus of This Talk

- Broadly applicable advices for any kind of talks

- Some specifics for scientific talks
  - Complex figures
  - Equations
  - Methodology
  - Proof

Outline

- ❑ Why should you bother doing talks?
- ❑ How to structure your talk?
- ❑ How to make your slides?
- ❑ How to give your talk?
- ❑ Great talks examples

Tell a Clear and Convincing Story

Define First Your Message

- The audience will remember at most one single message
  - Which message you want to audience to remember?
  - Can you express this message in less than a minute in an elevator?
- Tailor you talk according to this message
- Don’t sell more, but sell it well

Do Not Present Too Much

- Common pitfall
  - "I did a lot and I will present every single bit of my work. They will be impressed!"
    - That shows you are unable to deliver a message
- Do not hesitate to cut your results
  - Better to present 10% the entire audience gets than 90% nobody gets

Adapt to the Audience

- The entire audience must understand your talk
  - Better to explain notions a part of the audience already knows than to lose another part during the talk
- Do not overestimate the knowledge of the audience in your field

Give a Structure to Your Talk

- Give a background
  - Adapt to the audience
  - Adapt the technical granularity of your presentation
  - Make it fun and catchy
- Motivate your work
  - Why is the subject important and interesting?
- Focus of your work
  - What is this presentation/work about in a single sentence? What is the problem?

Give a Structure to Your Talk

- ❑ Show methodology and tools
- ❑ Show results
  - Clearly show your contributions
- ❑ Conclude with a summary of contributions
  - Impact of this work
  - Future work rarely makes sense unless you are really planning future work

Tell a story from the background to the conclusion

Give a Structure to Your Talk

- Give an outline
  - You can give it first before or after (better) the background
  - Repeat the outline before each new part
  - Use color to show where you are
- Make clear the structure of your talk to the audience
  - No suspense

Give a Structure to Your Talk

- No need to go deep into related work (unless it is a survey)
  - Your contributions must be the core
  - But, be prepared to discuss related work

Alternate Structures

- You need to know what you are doing
  - More original means more risks

- Alternate questions and answers
  - Appropriate for tutorials and general talks
  - Less appropriate for technical talks
    - But, can be used to introduce the problem and each contribution

Alternate Structures

- No slides
  - Need to be a very strong speaker
  - Need a very well structured presentation
  - Need a very high effort from the audience
    - You must transmit energy
  - Some (lazy) people don’t like such presentation

Make Summaries

- For each important result
- At the end of each part of your talk

Clearly show the take home messages

Anticipate Q&A

- Q&A are part of the talk, don't underestimate its importance
- Prepare backup slides
  - Very impressive when it works
  - You can put technical details or results you did not have time to address in them
- Be prepared to answer questions
  - Rehearse with colleagues
  - Be prepared to hard questions

Questions You Must Ask Before You Prepare Your Talk

- ❑ My goal?
- ❑ My single message?
- ❑ Audience?
  - Background, knowledge, size, expectations

Adapt your talk and material to each context

  - Size, position of the screen, my position

Outline

- ❑ Why should you bother doing talks?
- ❑ How to structure your talk?
- ❑ How to make your slides?
- ❑ How to give your talk?
- ❑ Great talks examples

Clarity and simplicity

"You give the talk, slides support it. Never compete with them, you will lose!"

The Story Before the Slides

- Define first your story before making any slide
  - The slides must not define or constrain the story
- Make slides to illustrate and support your story

Slide Template

- Avoid overloaded templates
  - Frequent with some companies that like to justify a costly graphical identity
- Unless you have a graphical talent, keep it simple
  - Make a clear distinction between the title and the rest
  - Do not use complex headers or footers
    - No need to give the presentation title, affiliation, authors list, company logo, etc. on each slide

Use Slide Numbers

- How do you know which slide it is over 30?
  - "The slide whose title is 'Use Slide Numbers'"
  - "The slide after 'Presentation Guidelines'"
  - "I don't remember, go back, again, again, again, again, stop… yes this one!"
- Used to ask questions and to practice
- Used during audio or video conferences
- At least 20 pt
  - Even at the back someone may ask a question

Use Slide Numbers

- In some cases, it is useful to also add the total number of slides
  - For a defense or a short talk
    - Easy way for the jury or the audience to assess whether you are close to the conclusion and will not exceed your allocated time
- For longer talks don't show the total number
  - A large number of remaining slides might be discouraging

Use non-serif fonts (times)

- Serif fonts are hard to read
  - Line width is not uniform
  - Thin lines may not render well with all projector types
  - Hard to read from the back
- Use
  - Arial: looks formal, very (may be too) popular
  - Tahoma: plain
  - Calibri: good alternative to arial
  - Century Gothic: elegant

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The Ban Comic Sans Campaign

- Some people hate the comic sans font
  - http://bancomicsans.com

- Reasons
  - Ubiquitous
  - Childish, immature, naïve
  - Inappropriately used
  - Designed at Microsoft

The Ban Comic Sans Campaign

- Safe side to do not use it
  - Be aware you might upset the audience
  - Don't use it for a job application
- I used it in my lectures starting in 2005
  - I believed it looks less scary than Arial for students
  - Dropped it in late 2011 (I prefer Calibri now)
- It is very rare today in academic presentations

Use Large Fonts

- Font must be larger than 24pt (here it is 32pt)
- Font must be larger than 24pt (here it is 24pt)
- Font must be larger than 24pt (here it is 20pt)
- Font must be larger than 24pt (here it is 18pt)
- Font must be larger than 24pt (here it is 16pt)
- Font must be larger than 24pt (here it is 14pt)
- Where do you stop to read it from the back?
  - Consider poor projectors, poor screens, poor eyes

Be neaT

- Do YOU like
  - slides with sppell **check** erors
  - Inconsistant:
    - *Capitalisation*
    - Bullet.
    - Struture,
    - **font**;
  - Ugly slides
  - poor use of symbol !!!
- Poor layout

Be Neat

- Do you like
  - Slides with spell check errors
  - Inconsistent
    - Capitalization
    - Bullets
    - Structure
    - Font
  - Ugly slides
  - Poor use of symbols
  - Poor layout

No Punctuation Mark.

- No punctuation mark:
  - At the end of sentences:
    - Period (.) ,
    - Colon (:),
    - Semi-colon (;),
    - Comma (,).
  - Apart from:
    - Question marks (?),
    - Exclamation marks (!).

No Punctuation Mark

- No punctuation mark
  - At the end of sentences
    - Period (.)
    - Colon (:)
    - Semi-colon (;)
    - Comma (,)
  - Apart from
    - Question marks (?)
    - Exclamation marks (!)

Use Meaningful Titles

- The title should summarize the slide content
- Do not use a same title with an increasing number
  - Introduction 1/5
  - Introduction 2/5
  - Etc.
- Poor variant “cont.”

How Many Colors?

- No more than three colors on a slide
  - Here I have four
- Use easy to distinguish colors like dark
  - Blue, Red, and Green
- Use colors to emphasize an important word
  - May be used to remind you to develop keypoints

How Many Colors?

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  - Here I have three
- Use easy to distinguish colors like dark
  - Blue, Red, and Black
- Use colors to emphasize an important word
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Background Colors

Never use light colors or low contrast
They may not render well

No

Never use light colors or low contrast
They may not render well

No

Never use light colors or low contrast
They may not render well

Yes

Never use light colors or low contrast
They may not render well

Yes, but ugly

Background Colors

- I like this one
  - Quite relaxing to look at such slides
  - Looks clean and simple
- Seems to work well with colors too
  - Red, Blue, Green (favor light colors)
  - Be careful with contrast
    - When there is light in the room, contrast is lower
    - You don’t have control on it, consider the worst case

Background Colors

- Don't use thin fonts
  - They may not render well
- I don't have much experience with this background
  - Seems to become more popular
  - Try it and make your own opinion

Colors and Projectors

- The universal rule
  - Projectors never render colors as you expect
- Be prepared to
  - Red that looks pink or orange
  - Blue that looks purple
  - Yellow that is invisible (never use yellow)
- Never use colors that are too close
  - Dark green, red, and blue is the safe side

Be Concise

- Do not write complete sentences as they make your message obfuscated in long lines of text
- Never forget that nobody can read your slides and listen to you at the same time unless you are reading what is in your slides. But, you must not read your slides, this is boring
- Omit technical details, there is no chance to explain everything in a single presentation. Instead, you should make the audience eager to read your work
- Do not believe complexity will impress your audience, it will simply make you look unable to express your idea

Be Concise

- Write small sentences
- Do not compete with your slides
  - You give the message, the slides support it
- Do not dig into details
  - Just deliver a message
  - Give a preview of your work/paper
- Be simple in your explanations

Should I Show One Bullet at a Time?

- Perfectly fine to show the entire slide if it is concise
  - No need to over animate
  - When appropriate, I like to show the title alone to introduce the slide
- But, if you feel you compete with your slides, show one (or a few bullets) at a time
  - Rule of thumb: do not animate bullets (or block of bullets) on which you discuss less than 20 to 30s

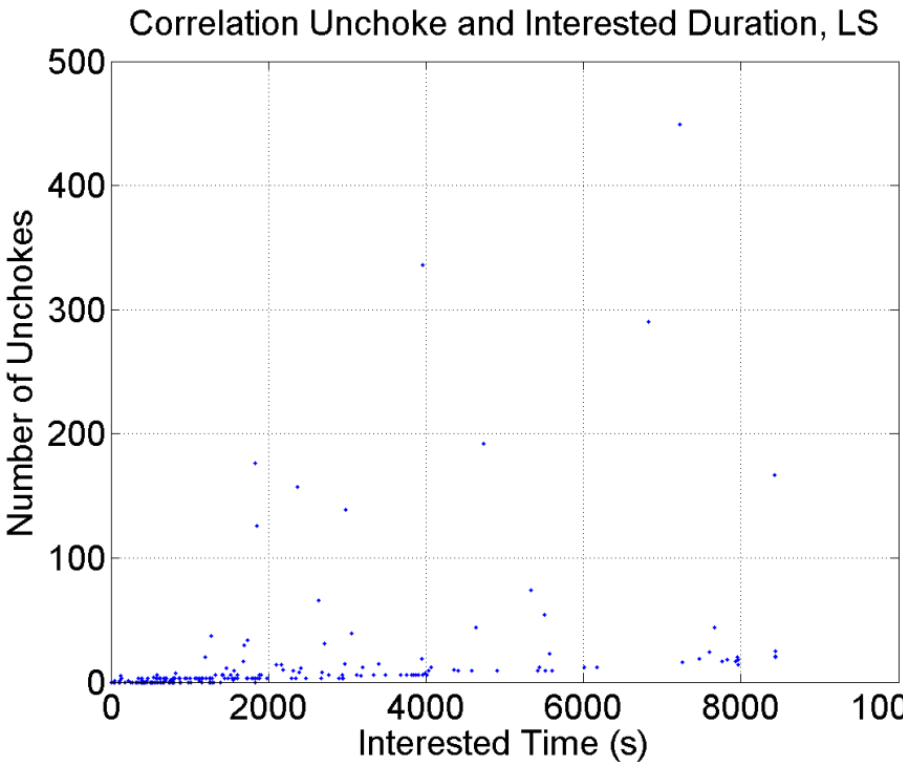
Should I Show One Bullet at a Time?

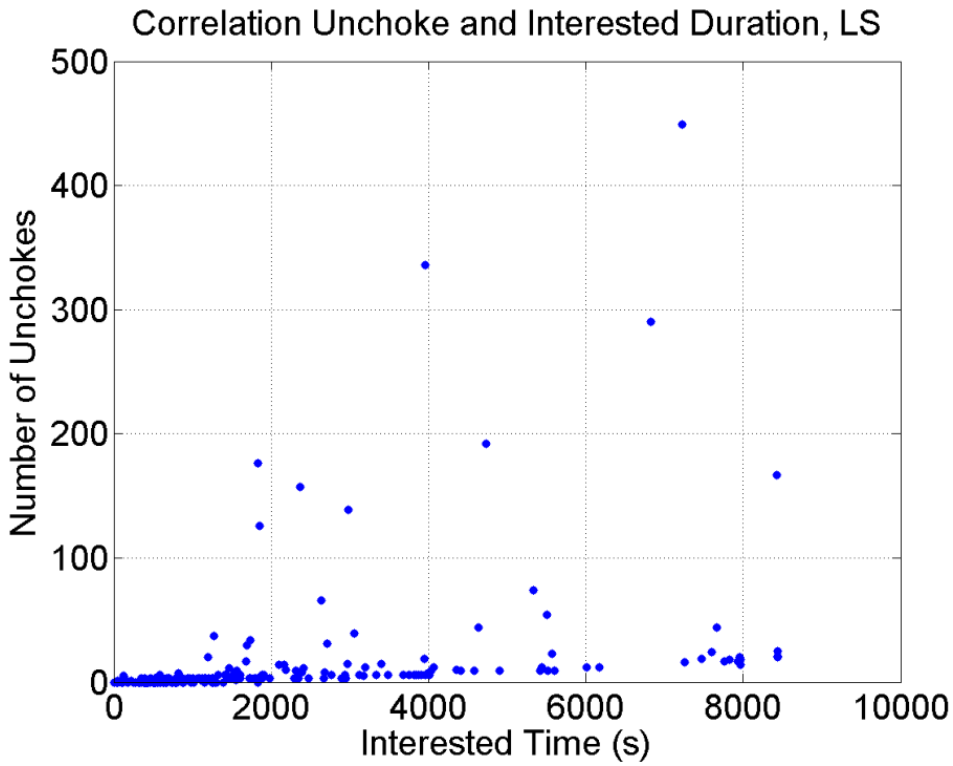
- ❑ But, never ever
- ❑ Animate
- ❑ Bullets
- ❑ Too Fast
  - Best way to compete with your slide
- ❑ In case of doubt, don't animate
  - Safe side

Figures, pictures, animations

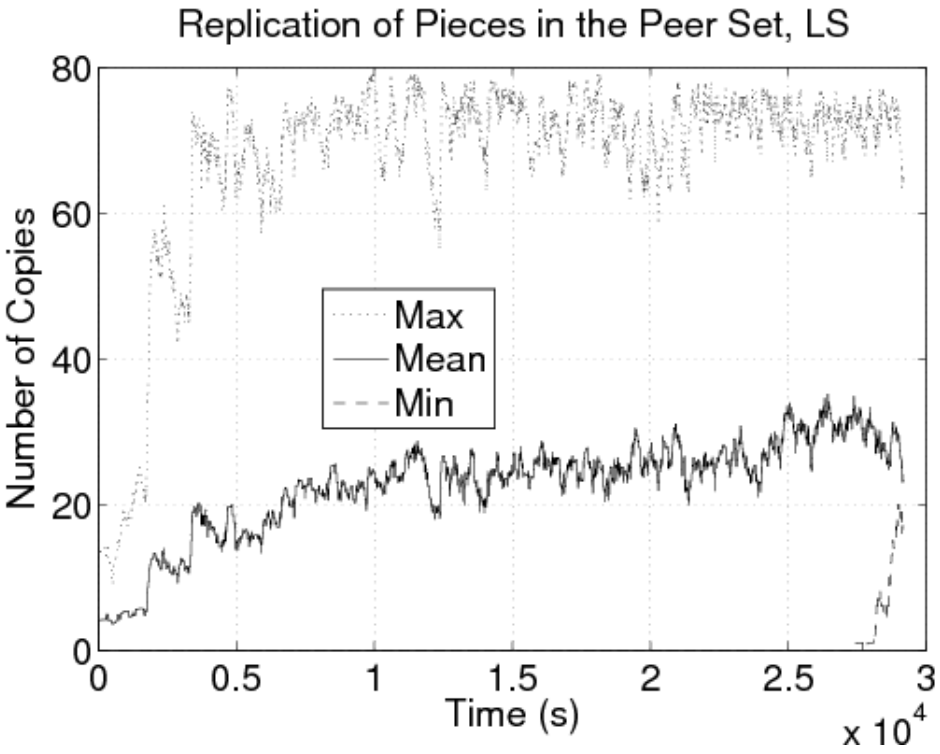
"Replace text with illustrations"

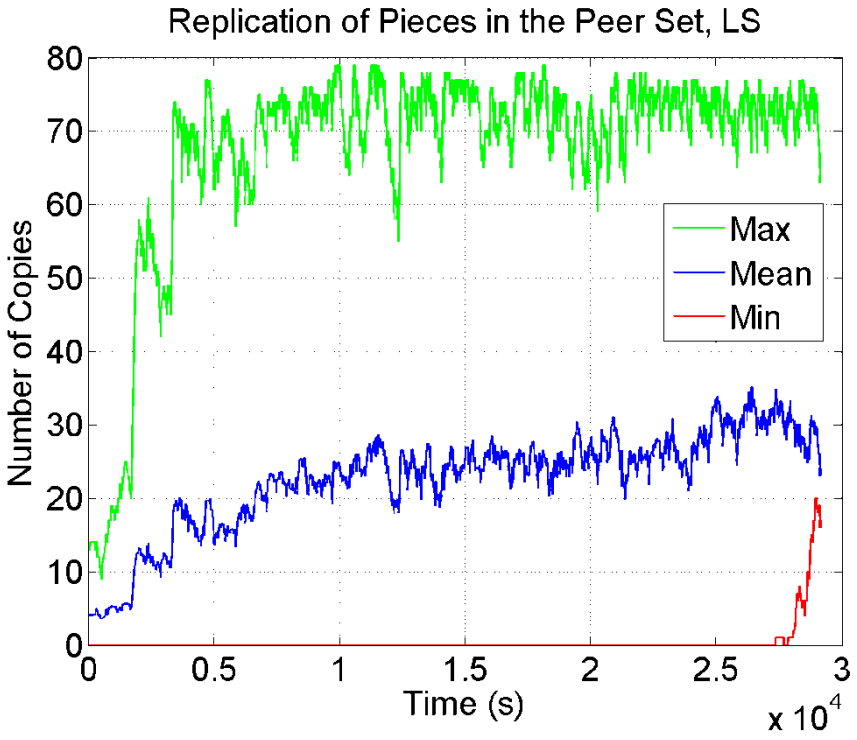
Use Large Symbols



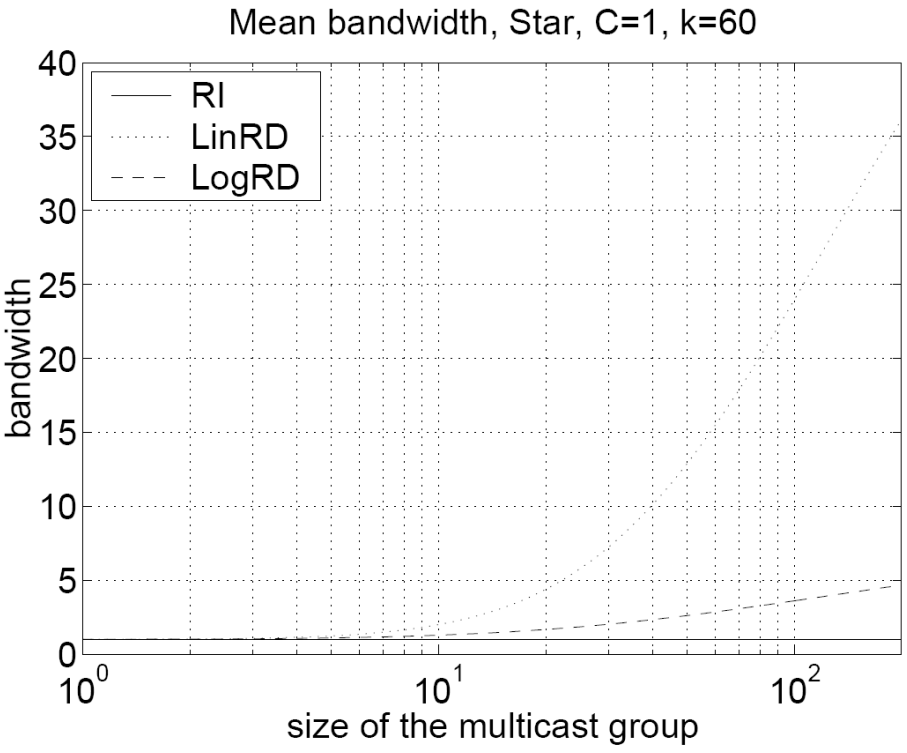


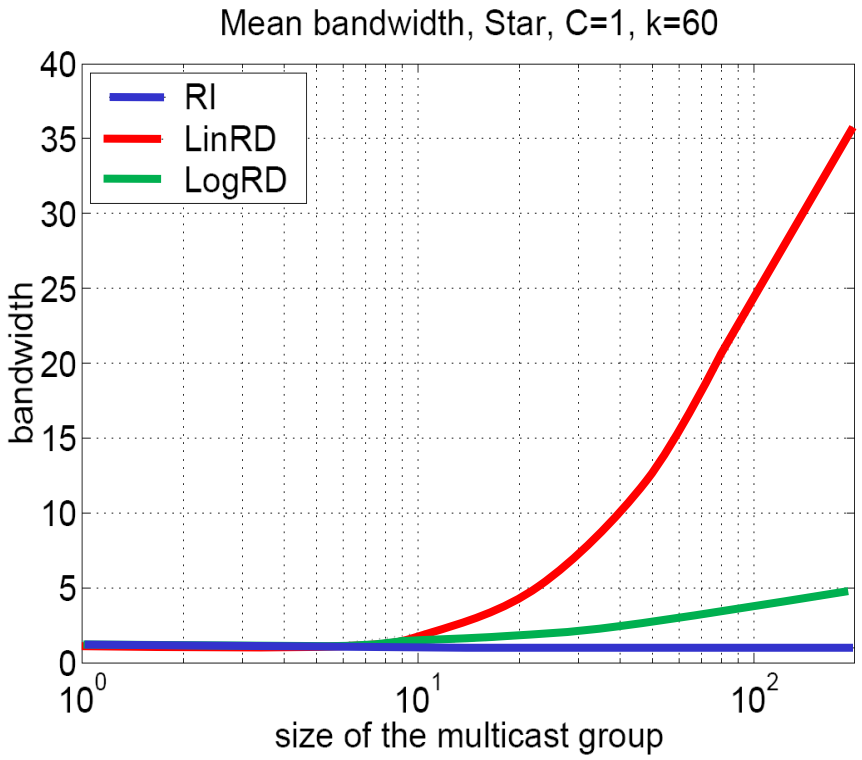
Use Thick Solid Lines and Colors





Never Use Camera Ready Figures





Use Pictures

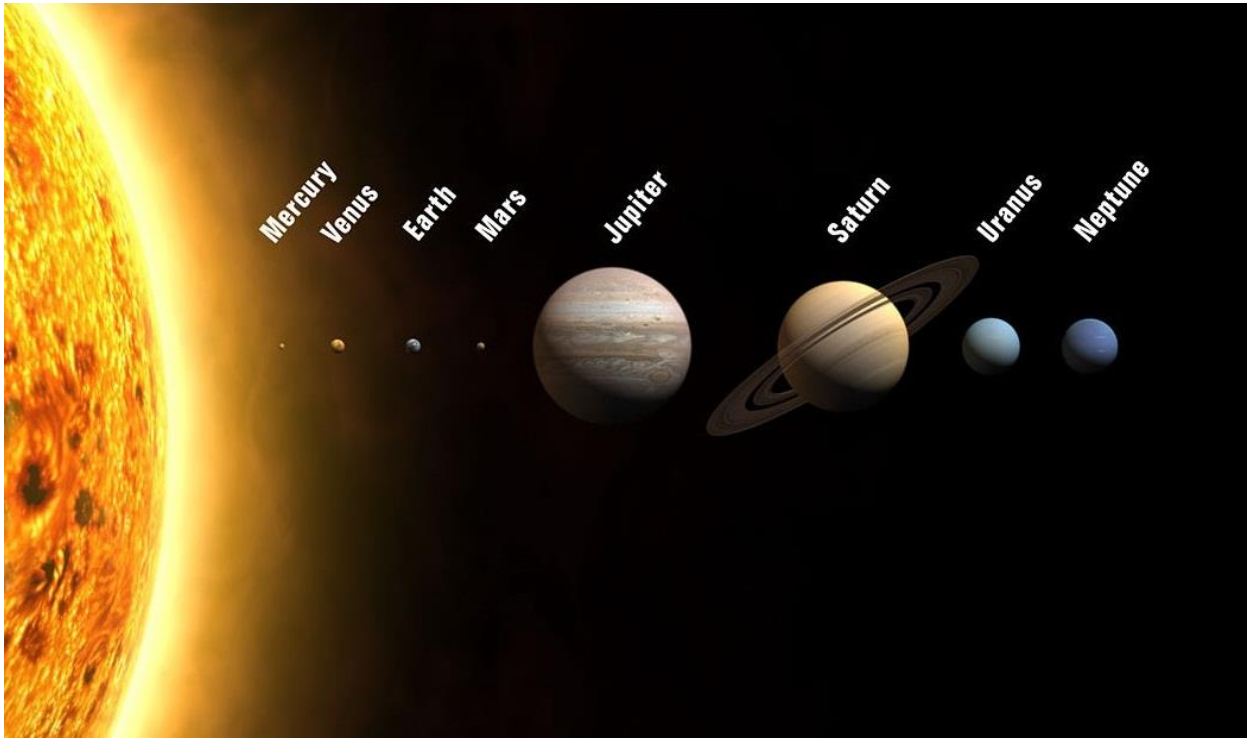
- High quality and full screen
- Illustrate concrete idea

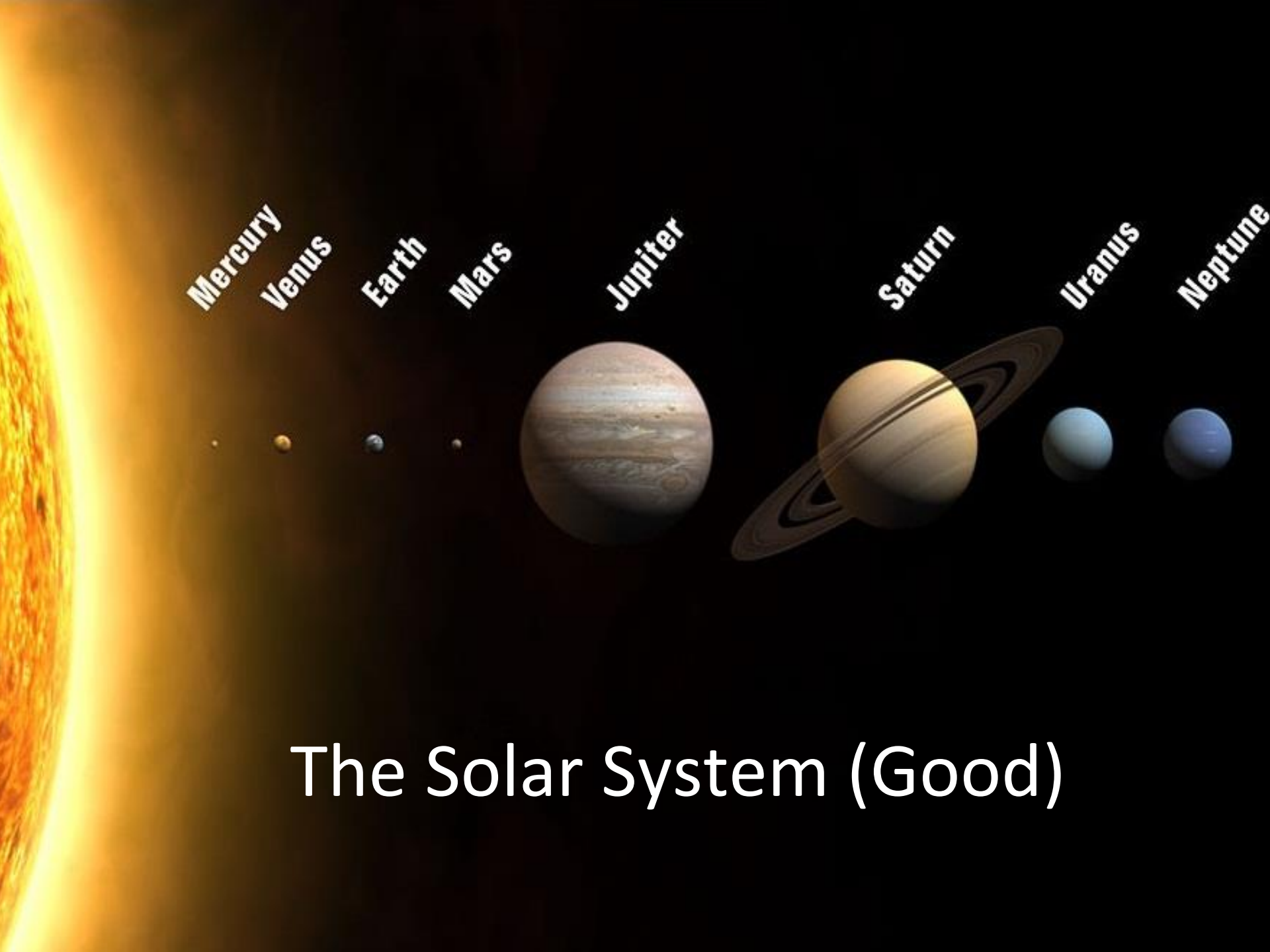
The Solar System (Poor)

- 8 planets
  - Mercury
  - Venus
  - Earth
  - Mars
  - Jupiter
  - Saturn
  - Uranus
  - Neptune

The Solar System (Still Poor)

- 8 planets
  - Mercury
  - Venus
  - Earth
  - Mars
  - Jupiter
  - Saturn
  - Uranus
  - Neptune





The Solar System (Good)

Evolution of Communication (Poor)

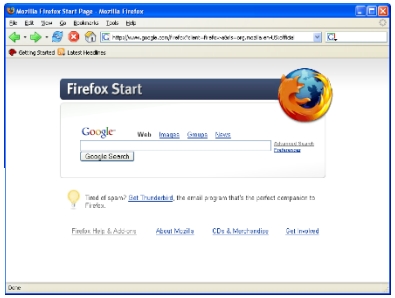
- Radio
- TV
- Web
- Smartphones

Evolution of Communication (Still Poor)

- Radio

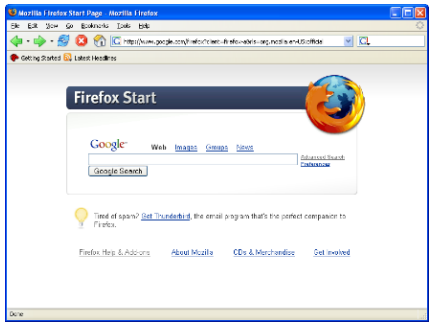
- TV

- Web



- Smartphones

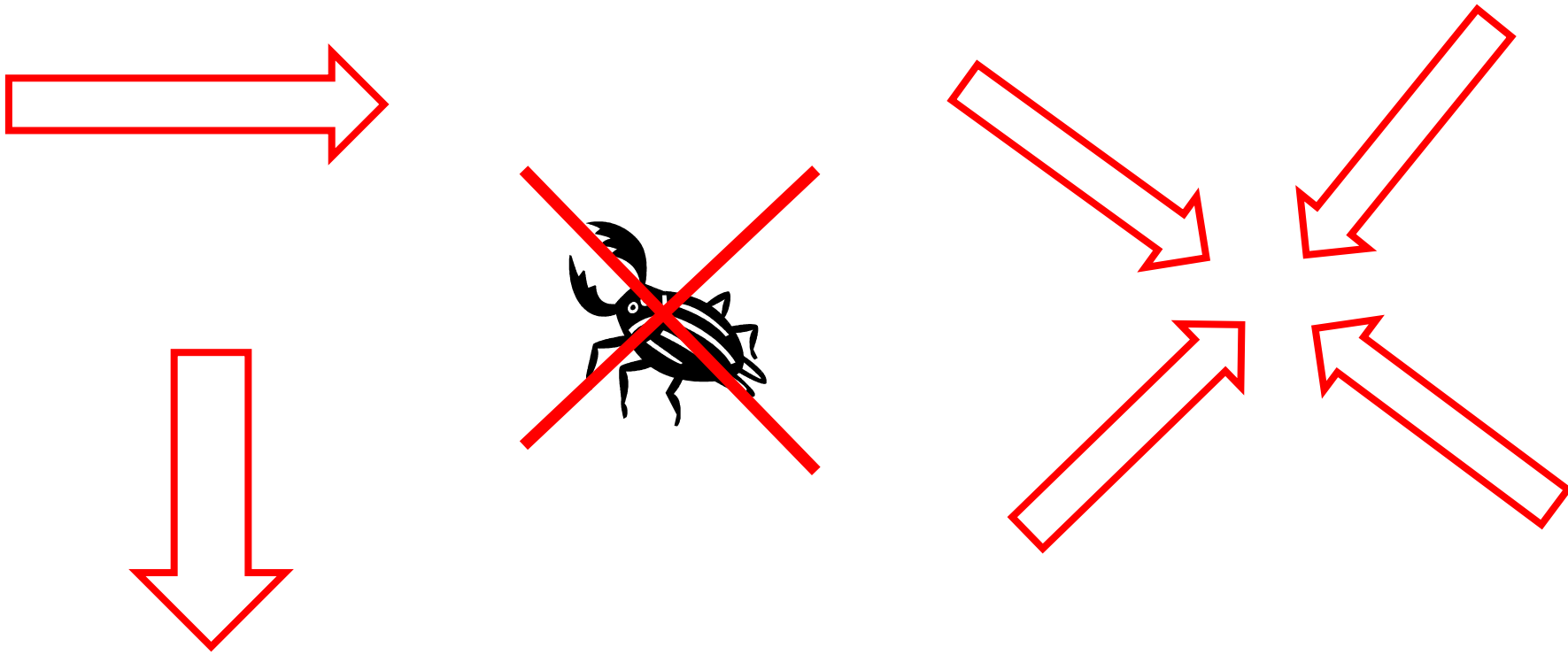
Evolution of Communication (Good)



Do Not Over Illustrate

- Do not use
  - Irrelevant illustrations
  - Weak metaphors
  - Animated images

Use Semantic Animations



Use with caution

Use Illustrations

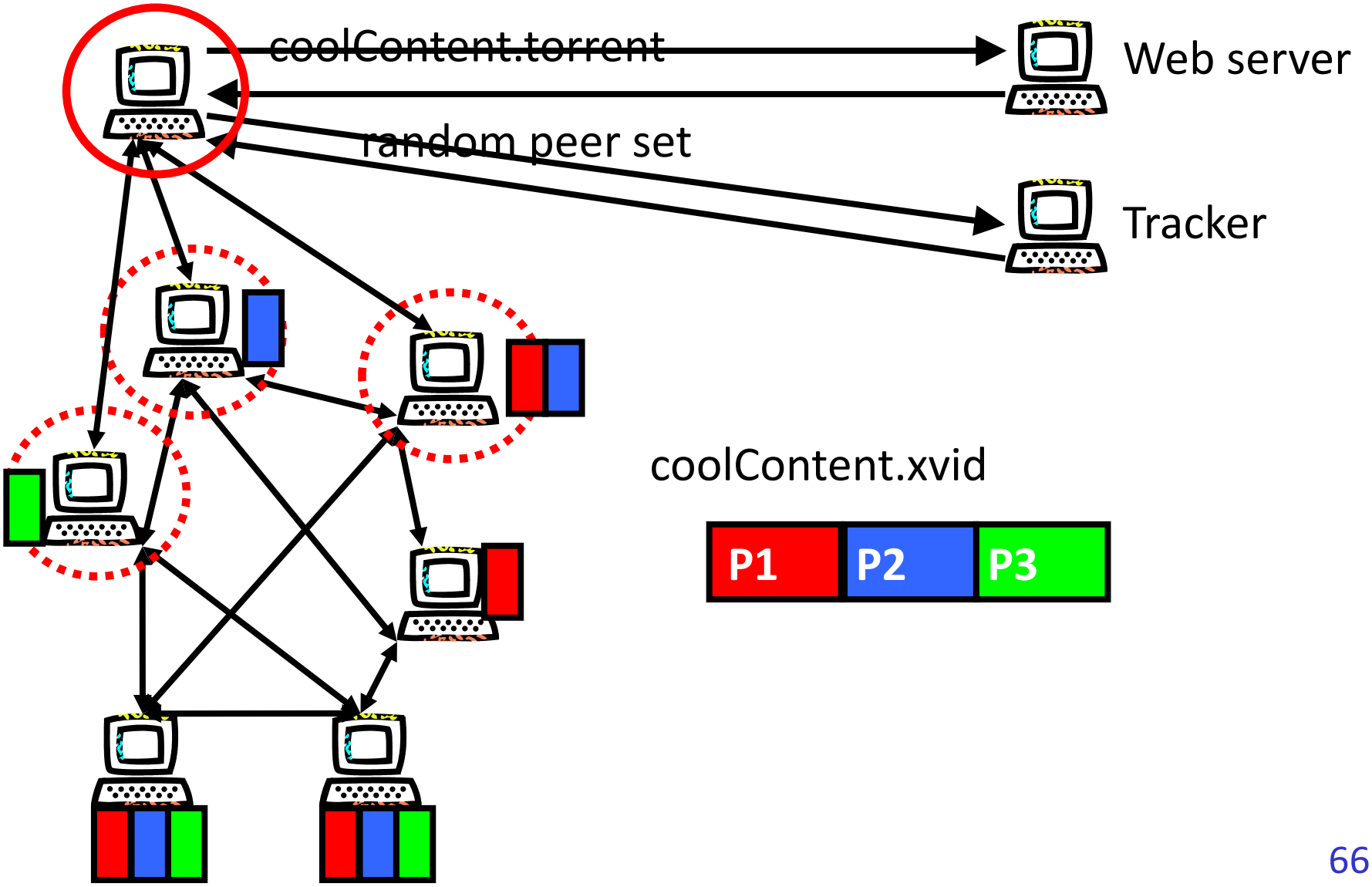
- Make your point clear and simple
- Give a mental image people are more likely to remember

- Always use a figure instead of a table

Without Illustrations (Poor)

- Prior to distribution
  - Content split multiple pieces
  - Metainfo file created by the content provider
- To join a torrent
  - Peer P retrieves metainfo file from a well-known website
  - P contacts the tracker
  - The tracker responds back with a peer set of randomly selected peers
  - P contacts peers in this set and start requesting different pieces of the content

With Illustrations (Better)



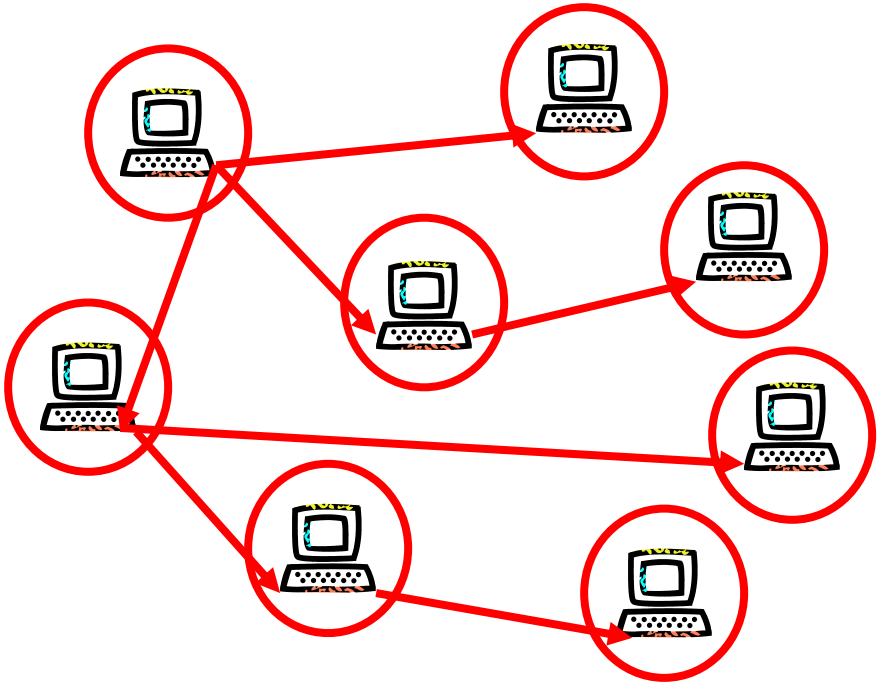
Use Enlightening Animations

- Animations must make complex idea simple to grasp
- No magic, it is a lot of work to make

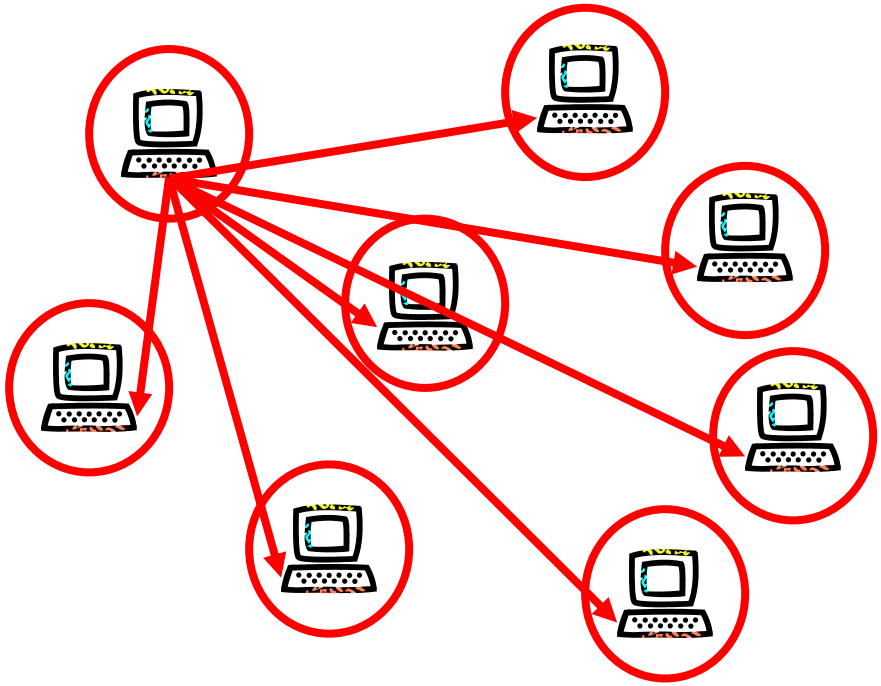
- Here are two examples

Use Enlightening Animations: P2P case

P2P



Client-server



Use Enlightening Animations: Sieve of Eratosthenes

A number is prime if it can only be divided by 1 or by itself

2	3	~~4~~	5	~~6~~	7	~~8~~	9	~~10~~	11
~~12~~	13	~~14~~	15	~~16~~	17	~~18~~	19	~~20~~	21
~~22~~	23	~~24~~	25	~~26~~	27	~~28~~	29	~~30~~	31
~~32~~	33	~~34~~	35	~~36~~	37	~~38~~	39	~~40~~	41
~~42~~	43	~~44~~	45	~~46~~	47	~~48~~	49	~~50~~	51
~~52~~	53	~~54~~	55	~~56~~	57	~~58~~	59	~~60~~	61
~~62~~	63	~~64~~	65	~~66~~	67	~~68~~	69	~~70~~	71

Credit: G. Berry, Collège de France, 25/01/08

Use Enlightening Animations: Sieve of Eratosthenes

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Use Enlightening Animations: Sieve of Eratosthenes

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12	13	14	15	16	17	18	19	20	21
22	23	24	~~25~~	26	27	28	29	30	31
32	33	34	~~35~~	36	37	38	39	40	41
42	43	44	45	46	47	48	49	50	51
52	53	54	~~55~~	56	57	58	59	60	61
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Credit: G. Berry, Collège de France, 25/01/08

Do Not Over Animate

- It is disturbing
- Annoying

- Useless

Design and *Presentation Zen*

- Should you focus on the design of the slides?
  - Question of time and money
  - Address issues by order of priority
    1. A well defined and clear message
    2. A well structured (and fun) story
    3. Adapt to the audience
    4. Tell your story with passion (you are already top 1%)
    5. Make beautiful slides

Slides are not the talk, they just support it

Design and *Presentation Zen*

- You cannot compete with Steve Jobs
  - He had an army of collaborators working on the keynotes
  - He had a visionary designer talent and stunning charisma
- But, you can get close by targeting clarity and simplicity
- To improve your design skills read
  - *Presentation zen* by Garr Reynolds
  - *Slide:ology* by Nancy Duarte

Clarity and simplicity (Poor)

- You give the talk
  - slides support it
- Never compete with them, you will lose!

(good)

Clarity and simplicity

"You give the talk, slides support it. Never compete with them, you will lose!"

(good)

Clarity and simplicity

"You give the talk, slides support it. Never compete with them, you will lose!"

Why You Have So Much Text in Your Slides?

- I am giving a lecture
  - There is not a single or a few messages, but a lot of technical details that you have to learn
  - I am using my slides as the material for my lecture
    - This can be disputed, the other option is to use a companion text document
    - But, I am putting in slides what I would write on a board (I have horrible hand written skills, believe me!)

Why You Have So Much Text in Your Slides?

- For any other public talk from 5 to 30 minutes (that is, 99% of the talks you will have to give)
  - Very few text
  - A lot of illustrations
  - See annex 1 (at the end of the slide set) for one of my 20 minutes talk
- For longer talks (tutorial, lectures…)
  - You might need text
  - But, focus on clarity, simplicity, and illustrations

Outline

- ❑ Why should you bother doing talks?
- ❑ How to structure your talk?
- ❑ How to make your slides?
- ❑ How to give your talk?
- ❑ Great talks examples

Practice Practice
Practice Practice

Have fun

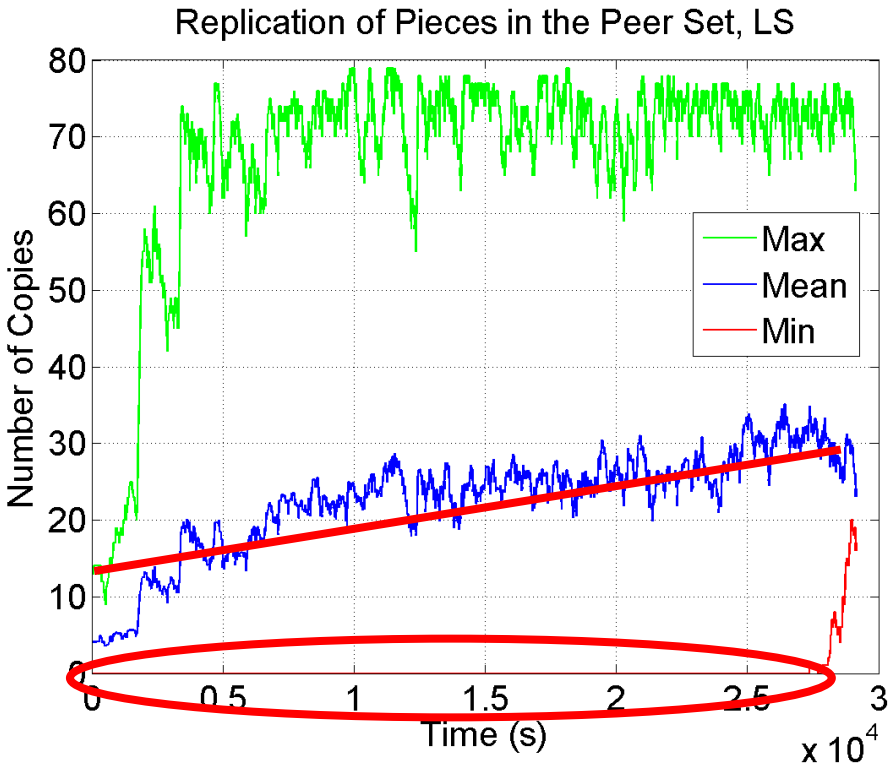
How to Show Something on a Slide?

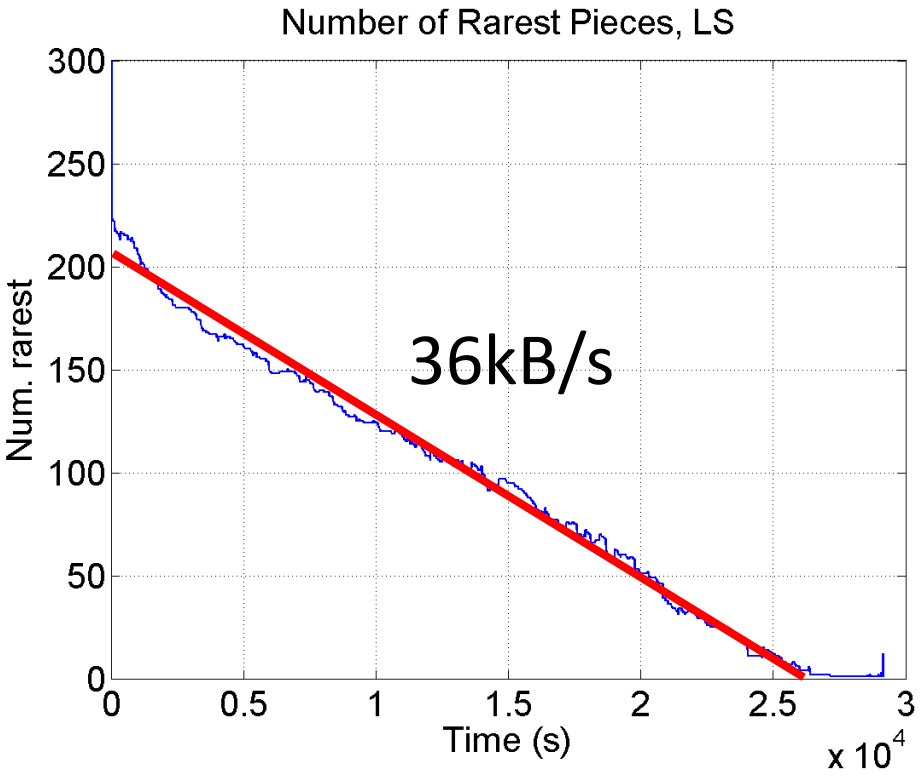
- You can touch the screen
  - Really touch the screen
    - Don’t shake the hand 5 meters in front of the screen
  - Not always possible
    - Screen might be too high or too far
  - Not the most professional solution

How to Show Something on a Slide?

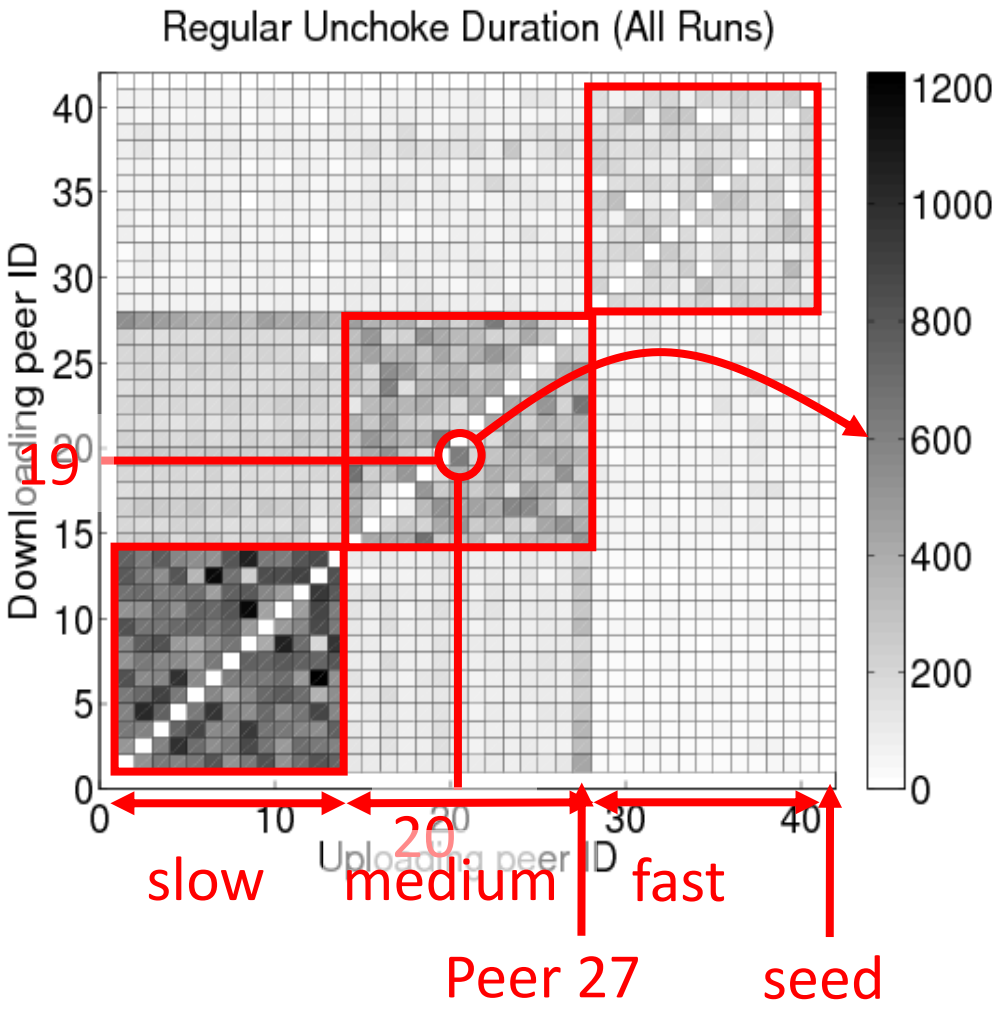
- You can use neat animations
  - Works in any case
  - Safe side
  - Many excellent options
    - Square, circles, ovals, arrows, etc.
    - See examples in the following
- But, never use a laser pointer
  - Show you are lazy and unprofessional
  - Aren't you shaking?

Use Thick Lines

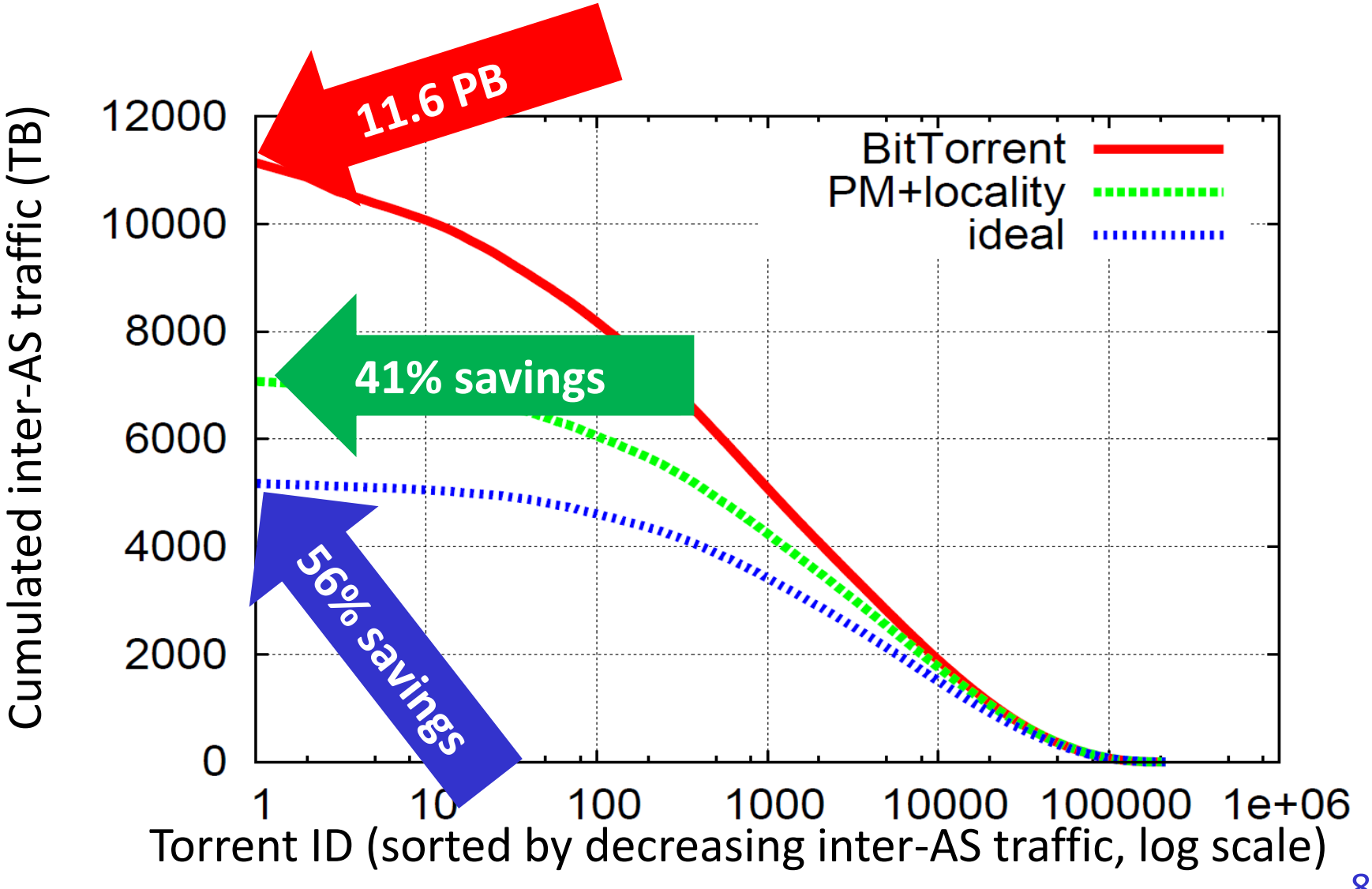




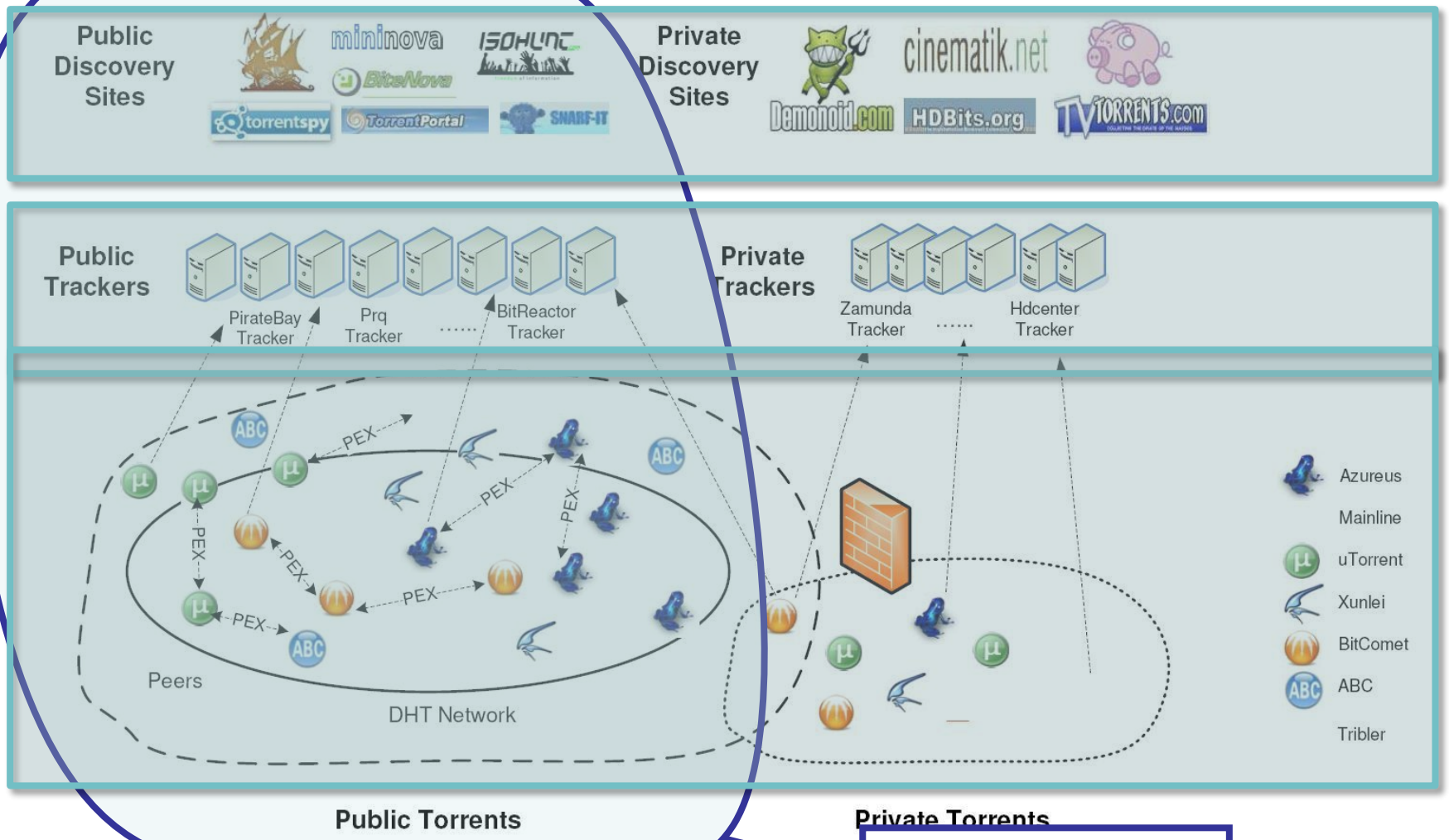
Use Thick Lines



Use Arrows


11.6 PB
41% savings
56% savings
BitTorrent
PM+locality
ideal
Cumulated inter-AS traffic (TB)
12000
10000
8000
6000
4000
2000
0
1
10
100
1000
10000
100000
1e+06
Torrent ID (sorted by decreasing inter-AS traffic, log scale)

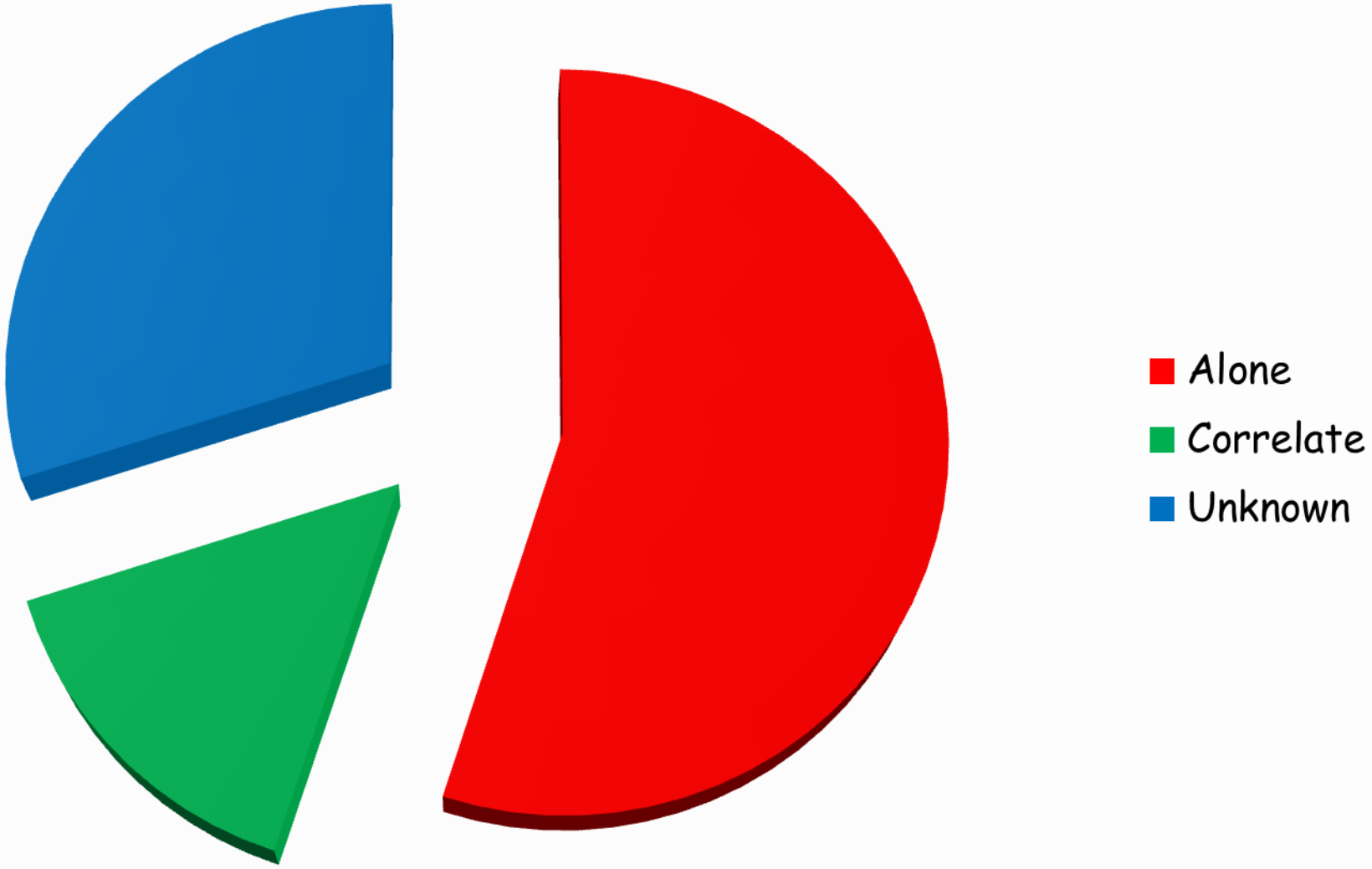
Use Semi-Transparent Squares



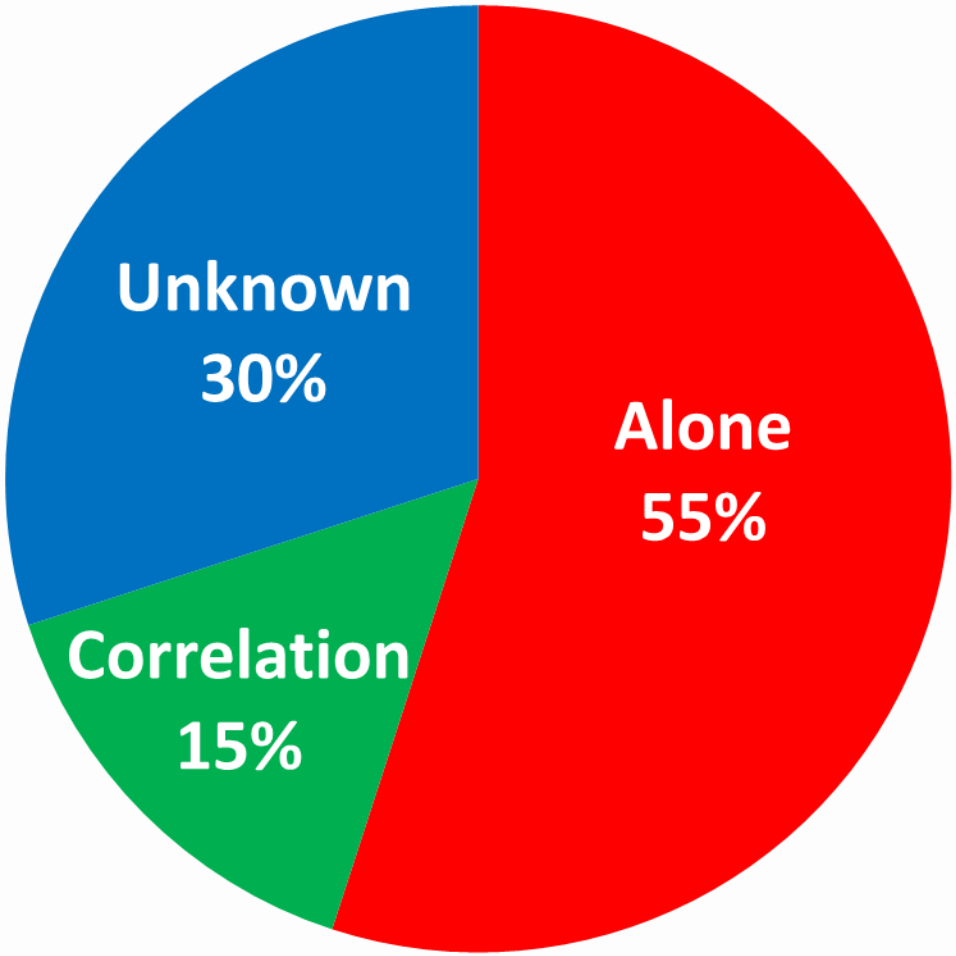
Credit: Zhang et al. [42]

Focus of [42]

Don’t Use 3D Charts



Use 2D Charts with Legend Inside



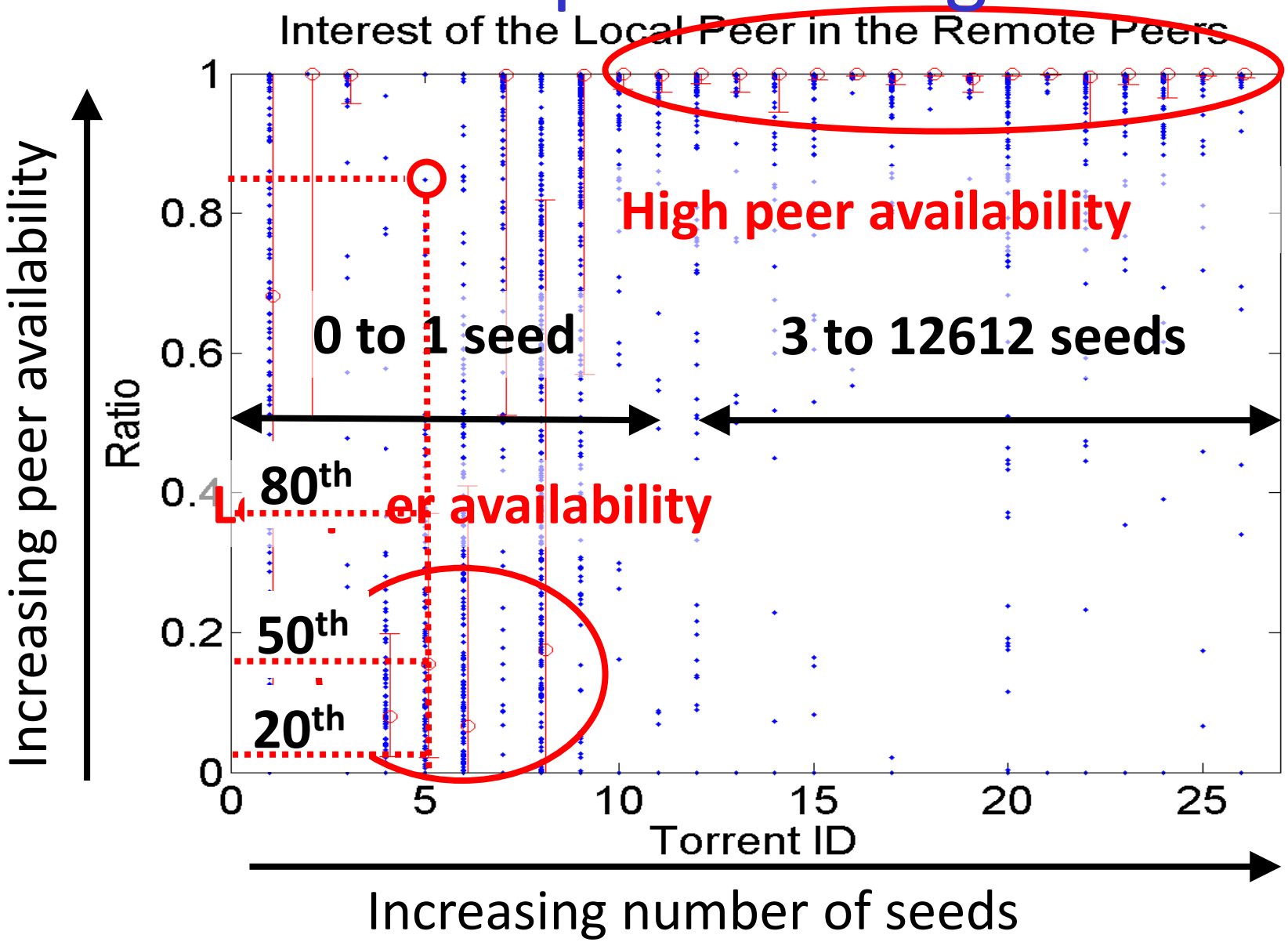
Explain All Slides

- Never present a slide you do not explain in details
  - Always drop a slide if you present it for less than 30 seconds
  - Spend time on complex figures or drop them
  - Spend time on equations or drop them
  - Talk on transition slides (e.g., outline reminders) or drop them
    - Use transition to summarize the previous part and introduce the next one

Minimum Explanation

- For each figure you must
  - Give for each of the x-axis, y-axis, and z-axis
    - Label, unit, scale (if log scale)
  - Give the legend
  - Explain all symbols
  - Take an example to illustrate a specific point in the figure
    - Very useful if the figure is complex

Example for a Figure



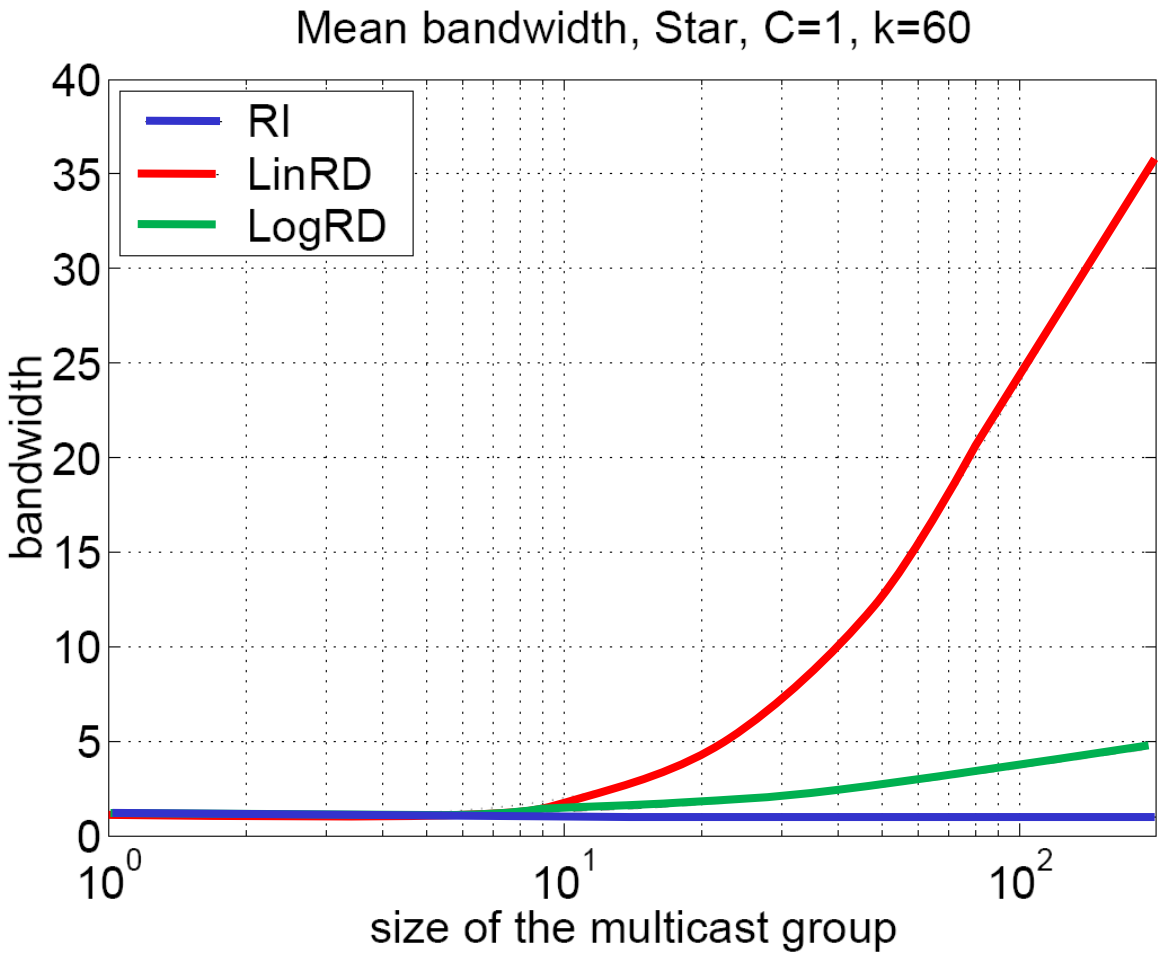
Example for an Equation

$$\bar{B}_{RI} = \frac{1}{k+m}\sum_{i=1}^{k+m}\frac{C}{k+1} = \frac{C}{k+1}$$

$$\bar{B}_{LinRD} = \frac{1}{k+m}\left(\sum_{i=1}^{k}\frac{C}{m+k} + \sum_{i=1}^{m}\frac{mC}{m+k}\right) = \frac{k+m^2}{(k+m)^2}C$$

$$\bar{B}_{LogRD} = \frac{1}{k+m}\left(\sum_{i=1}^{k}\frac{C}{k+(1+\ln m)} + \sum_{i=1}^{m}\frac{C(1+\ln m)}{k+(1+\ln m)}\right) = \frac{k+m(1+\ln m)}{(k+m)(k+1+\ln m)}C$$

But, Prefer the Figure to the Equation



Introduce and Summarize Slides

- For each important slide
  - Say a one sentence introduction
    - What you are going to discuss now
  - Say a one sentence summary
    - If the audience has to remember a single sentence it is this one

For very important results, show the take home message

Be Redundant

- Repeat several times
  - I'm going to explain…
  - My explanation is…
  - I just explained…
- Never too much redundancy

Never Go Back

- It is bad habit to go back to a previous slide
  - If you forgot something, just tell it
  - If you need a previously shown image, add it again
- Navigating within slides will lose your audience

Never Exceed Your Allocated Time

- This is a lack of respect for the audience and the next speakers
  - Not admissible, not professional
- Should never happen if you are well prepared

Never Exceed Your Allocated Time

- In case you feel you will exceed the allocated time
  - Drop slides
  - No problem to drop a full part
  - Never drop summary of contributions
  - Never stop in the middle of somewhere

One Slide Every Two Minutes

- Usually everybody agrees
- Now, count!
  - 10 minutes means 5 slides
  - 20 minutes means 10 slides
  - How many slides do you have for a 20 minutes talk?
    - I have seen for 20 minutes people with more than 50 slides full of text!

One Slide Every Two Minutes

- You can violate this rule if
  - You have time to explain in details all slides
  - You will not exceed your allocated time
  - You will not speak much faster
- Hard to spend on average per slide
  - less than 1 minute (really short)
  - more than 3 minutes (start to be boring)

Use a Watch

- On a room wall, in front of you
  - So that you can see it, but not the audience
- On your desk
  - Digital one with large enough numbers
- On PowerPoint
  - Presenter mode
    - Very convenient, you can get comments and a few slides before and after the current one

For Long Talks

- Several hours to several days
  - Make often summaries
    - At the end of each part
    - After each break
    - At the beginning of each new day
  - Involve the audience
    - “Jon, what do you remember from the last hour?”
    - “Jim, can you in few words explain me this part?”
    - But, don’t be too pushy: it is not an exam!
    - And, always make again the summary yourself

Q&A

- Reformulate questions
  - Make sure you understood them
  - Make sure everybody hear them
- Be concise in your answer
- Do not start a discussion
  - “I propose to continue this interesting discussion during the break. Another question?”

Q&A

- Never bluff or lie
- Acknowledge when you don't have the answer
  - "Thank you for that point, I don't have an answer now. We will definitely look at it."
  - "I don't know this article, but it looks similar to what we did. Can you send me the pointer?"
  - Never forget to send back your answer by email

Q&A

- Questions might be
  - Aggressive
  - Stupid (most of the time, such questions show you made a poor presentation)
  - Hard to answer
  - Showing you are wrong
- In any case never
  - Lie, aggress, or complain

Q&A

- During a conference, if you don't understand the question
  - Try to reformulate based on what you got
  - If after one try you still don't understand it
    - Ask the session chair
  - If after two tries nobody got it
    - Don't start a discussion at that point
    - Propose to take it off-line after the talk

Use Your Body

- Use eye contact
  - Do not stare (no more than 10 seconds)
  - Do not avert or switch fast
- Use your hands
  - To support visually what you say
- You can walk, but
  - Do not stand in front of your slides
  - Do not continuously walk along a line
  - Walk on a triangle and stop at each vertex

Use Your Body

- Stay in front of the audience
  - Aside the slides, but not in front of them
  - Do not show your back or your side
  - Do not persistently move while speaking

Use Your Voice

- Make a short pause before each important message
  - In the order of a few seconds
  - Pauses are even more effective than raising voice
- The rhythm of the speech is what makes a big difference to catch the attention

Use Your Voice

- Vary your voice level
  - Speaking softly catch better the attention than speaking even louder
    - Alternating loud and soft speech catch the best the attention
    - You need to practice a lot to find the right balance
  - My rule of thumb
    - Make a pause and speak softly before a very important result
- Never read your slides or notes

Show Enthusiasm

- If you don't show enthusiasm presenting your own work, do you really believe that the audience will be enthusiastic
  - Listening to you
  - Reading your work
  - Inviting you
  - Discussing with you

Use a Second Screen

- Do not look at your slides on the primary screen
  - You must not show your back to the audience
  - Hard to keep the eye contact this way
- Use instead a second screen (in clone or extended view)
  - Place it appropriately
    - Stay in front of the audience when you look at the slides
  - Hard to see you are looking at the slides

Use a Remote Controller

- Seamlessly synchronize your talk with your slides
  - Freedom to move
  - Most professional
- Use a simple remote controller
  - Forward, backward, hide slides (black screen)
  - Small enough to fit well in the hand
    - Never use a wireless mouse
- Do not shake or point-toward-the-slides the hand when you switch slides

Practice

- Best speakers practice the most
  - No improvisation or spontaneity
  - To look spontaneous you even need to practice more
- Stand up and speak with loud voice to practice
  - Practice at least once using a projector
- Practice with colleagues (once well trained)
- The shorter the talk the more you have to practice
- Be prepared to answer hard/aggressive questions

Practice

- To prepare a 20 minutes talk
  - Three days for a first version of the slides
  - Around 10 rehearsal in front of my desk
  - Around 5 “in situation” rehearsal
    - Final version of the slides
    - Stand up
    - Speak loud
    - May use a real projector
    - Stringent time constraint
    - In front of colleagues

Practice vs. Energy

- How to project energy if you lost it during rehearsals?
  - Don’t repeat the day of your presentation and only once the day before
  - Sleep well the night before
  - Convert your stress into energy

Practice vs. Energy

- Practice permits to control the energy
  - Theatre actors performing on stage every day have to project a lot of energy
    - The more they perform, the more the energy they project is appropriate
  - The less you practice the more you will use your energy to
    - Keep the focus
    - Find what to say
    - Fight against your stress

Practice and Experienced Speakers

- Experienced means +50 presentations or +100 hours of presentations
  - If it is not your case, you will never practice too much
  - If you are that experienced, you will probably not have time to practice that much
    - Your experience will somewhat compensate a lack of practice
    - But, if you have a tight schedule and want to impress, you will have to practice

Dress Well

- Always dress better than the audience
  - Show that you respect the audience
  - If you don't care for your presentation or of the audience, how will you dress?
    - As every day!
- But, do not be overdressed
  - Ask the dressing convention of your community/audience

Avoid Bad Surprises

- Ask weeks before your talk to your session chair or organizer
  - Talk duration, questions duration
  - Presence of a projector
  - If you have a laptop
    - Can you use it or do you have to use the computer of the conference?
  - If you don’t have a laptop
    - Is there a computer that you can use?
    - Which OS, which version of PowerPoint, PDF only?

Avoid Bad Surprises

- Ask weeks before your talk to your session chair or organizer
  - Audience
    - If it is a well known conference, better ask your colleagues/advisor
    - If it is not a regular talk at a conference (tutorial, interview, visit, etc.) you must ask

Avoid Bad Surprises

- Make backup copies of your slides on two different supports
  - Don’t put everything in a same luggage
- Make your slides available on-line
- Make copies in several versions
  - In addition to the latest version, for compatibility issues, use backups in older versions (for PowerPoint it is usually 97-2003)
- Check that all copies are the last version of your presentation

Avoid Bad Surprises

- ❑ Introduce yourself to the session chair or organizer well before your talk begins
  - Might be hard to find during big conferences
  - You have to give a short biography to the session chair
    - 3 sentences
- ❑ Arrive early in the conference room
  - Don’t hesitate to move chairs or tables to make you more comfortable

Avoid Bad Surprises

- Test your presentation
  - Go through all slides to see if everything is ok
    - Must check colors and animations
- Test the remote controller
  - Batteries

Avoid Bad Surprises

- If you use your laptop
  - Restart it half an hour before your presentation
  - Stop all applications
    - Avoid popups
  - Stop wifi
    - Avoid system update popups or reboot
  - Use a power cable
  - Deactivate sleep mode, screen saver

Avoid Bad Surprises

- Sleep well and eat enough to do not pass out
  - A small bottle of water might help

Some Facts on the Audience

- They want to be elsewhere
  - Early in the morning: in their bed
  - Around noon: eating
  - Early in the afternoon: sleeping at the swimming pool
  - Late in the afternoon: dinner or social event
  - In the middle: waiting for the coffee break

Some Facts on the Audience

- ❑They don’t know you
- ❑They don’t know your work
- ❑They don’t know your field
- ❑They have no reason to like your work
- ❑They have no reason to listen to you

Some Facts on the Audience

- They have already ingested boring presentations
- They are laptop addicts
  - They are reading their emails, browsing the web, reading online newspapers, skyping, etc.

You have to wake them up and catch their attention

How to react to…?

- People you lost
  - You lost them, so work for the ones you haven't lost yet
  - Don't repeat what you feel the lost audience didn't get
    - You will lose the last ones that follow you
- Nasty people (aggressive, commenting…)
  - Focus on other people
  - Don't give them the opportunity to disrupt you even more

Outline

- ❑ Why should you bother doing talks?
- ❑ How to structure your talk?
- ❑ How to make your slides?
- ❑ How to give your talk?
- ❑ Great talks examples

Wonderful Examples

- Technical talks
  - Scott Shenker: The Future of Networking, and the Past of Protocols, Open Networking Summit 2011
    - Try http://www.youtube.com/watch?v=YHeyuD89n1Y
  - Hans Rosling: Stats that reshape your worldview, TED 2006.
    - Try http://www.ted.com/talks/hans_rosling_shows_the_best_stats_you_ve_ever_seen.html
    - See http://www.gapminder.org/

Wonderful Examples

- General talks (not scientific)
  - Randy Pausch Last Lecture (in english)
    - How to communicate passion?
    - Try http://www.youtube.com/watch?v=ji5_MqicxSo
    - Or search google for “Randy Pausch Last Lecture”

Wonderful Examples

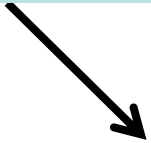
- General talks (not scientific)
  - Michel Serres aux 40 ans de l'INRIA (in french)
    - How to keep an audience of specialists focused during one hour?
      - Remember: a clear, well structured and fun story adapted to the audience and told with passion are way more important than any visual support
    - Try http://www.youtube.com/watch?v=kRFXFDmqCqY&list=PL6E3E1B24787ECD62

Wonderful Examples

- Watch talks on http://www.ted.com/
  - Extremely high quality standard
  - Elizabeth Gilbert on nurturing creativity
    - http://www.ted.com/talks/elizabeth_gilbert_on_genius.html

Thank you!

- Put here title and contact
- Everything that facilitates access to your work
  - Email, URL, etc.



How to Give a Good Talk

Arnaud Legout

arnaud.legout@inria.fr

Annex 1
Example of one of my talk

(with annotated slides)

You can access the video recording of the talk (in French) here:
http://videos.rennes.inria.fr/JourneesScientifiques/indexArnaudLegout.html

Check List

- ❑ My goal?
  - Convince the audience that I am doing interesting and strong researches with practical impact
- ❑ My single message?
  - We collected the entire Twitter social graph and extracted its macrostructure
- ❑ Audience?
  - 200 computer scientists, but not in my field

Check List

- Duration?
  - 20 minutes for the talk
- Room characteristics?
  - Theatre, impossible to move (fixed mic) or touch the screen

Macroscopic Exploration of the Twitter Social Graph

Arnaud Legout

EPI DIANA, Sophia Antipolis

arnaud.legout@inria.fr

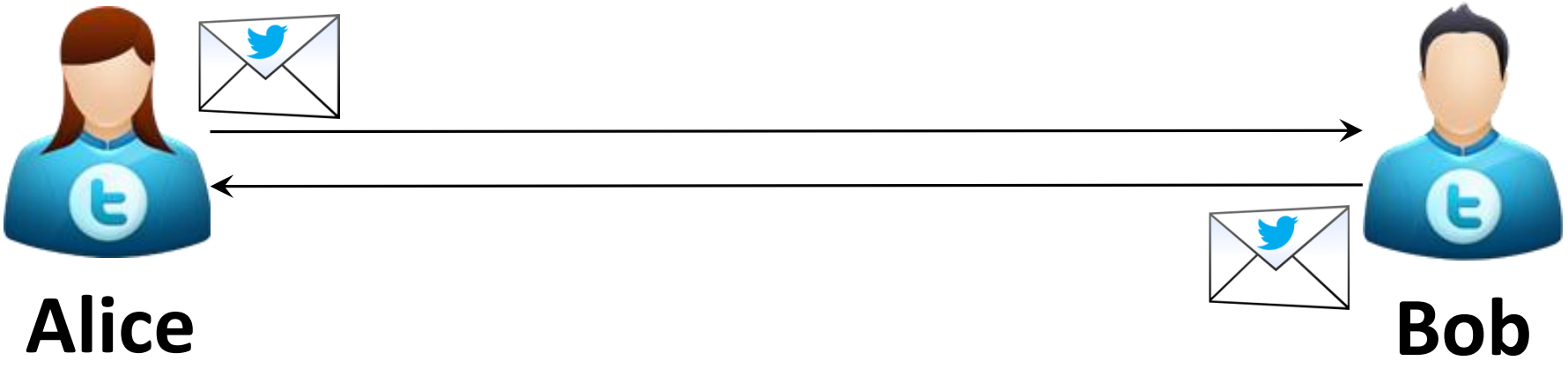
Friends


TF1
Producer
Consumer

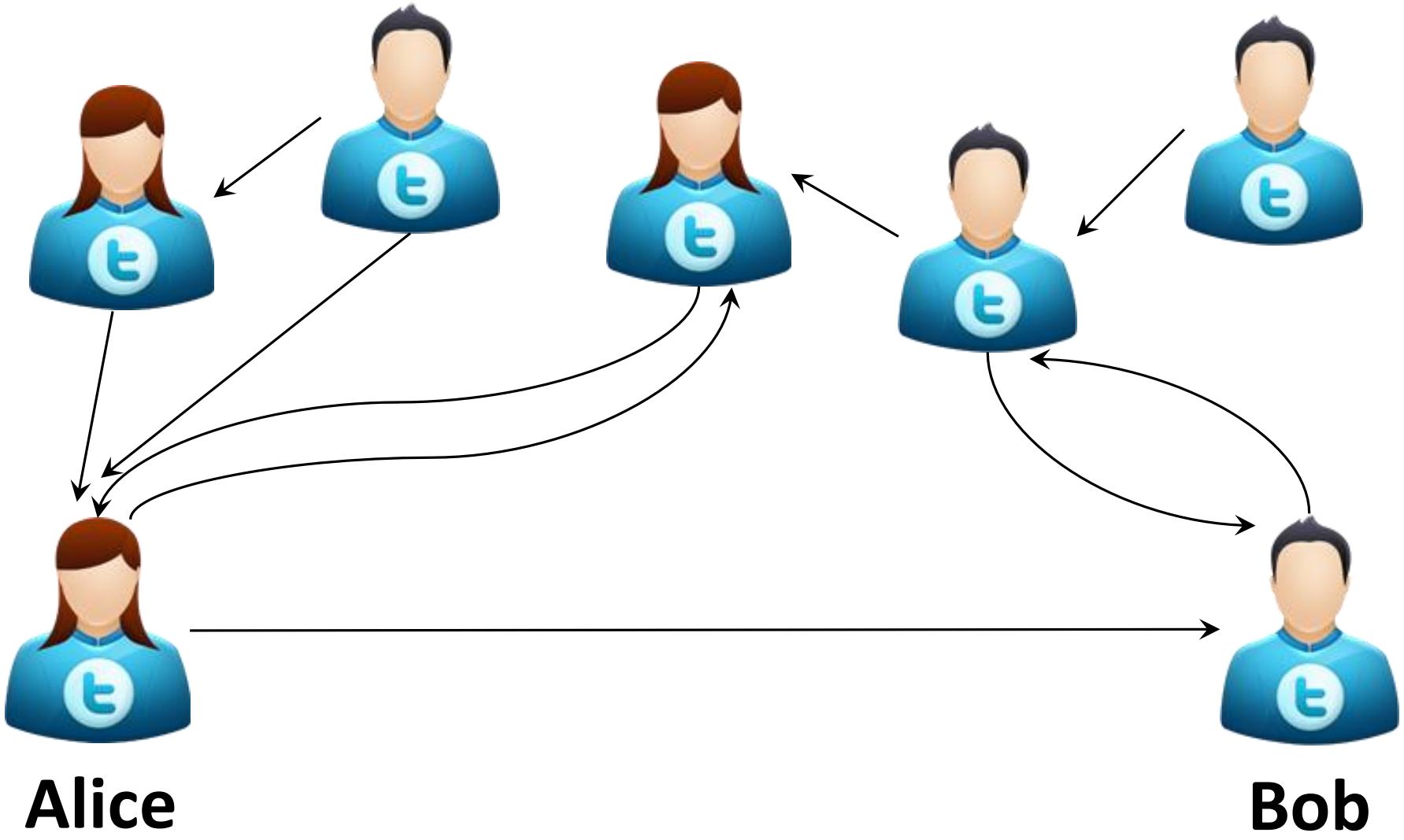
Follow Relationship in Twitter

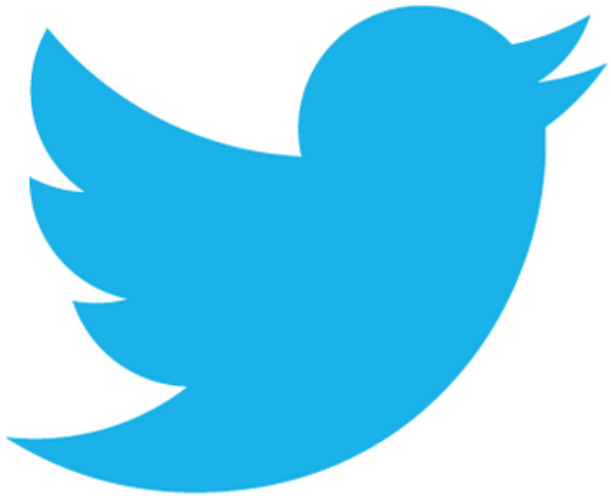
Bob follows Alice

Alice follows Bob



Twitter Social Graph



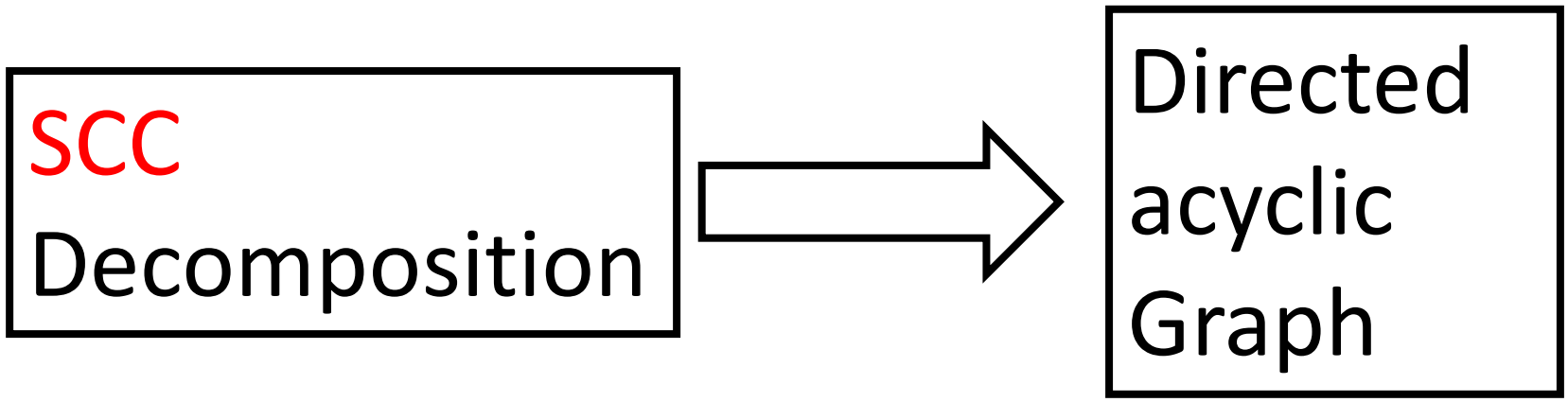


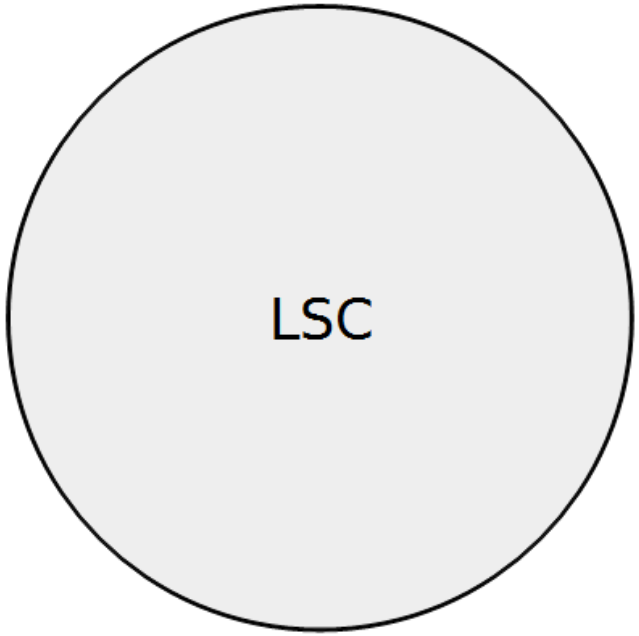
+500 million nodes
+24 billion edges

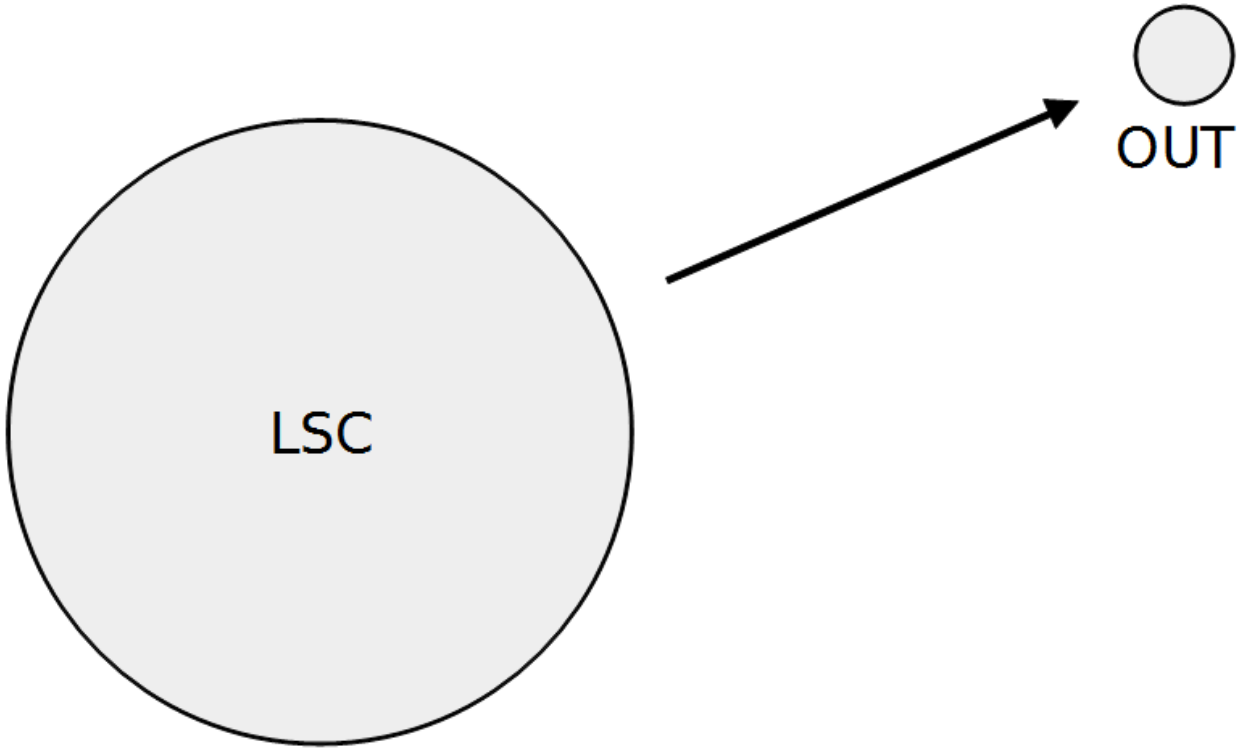
Challenges

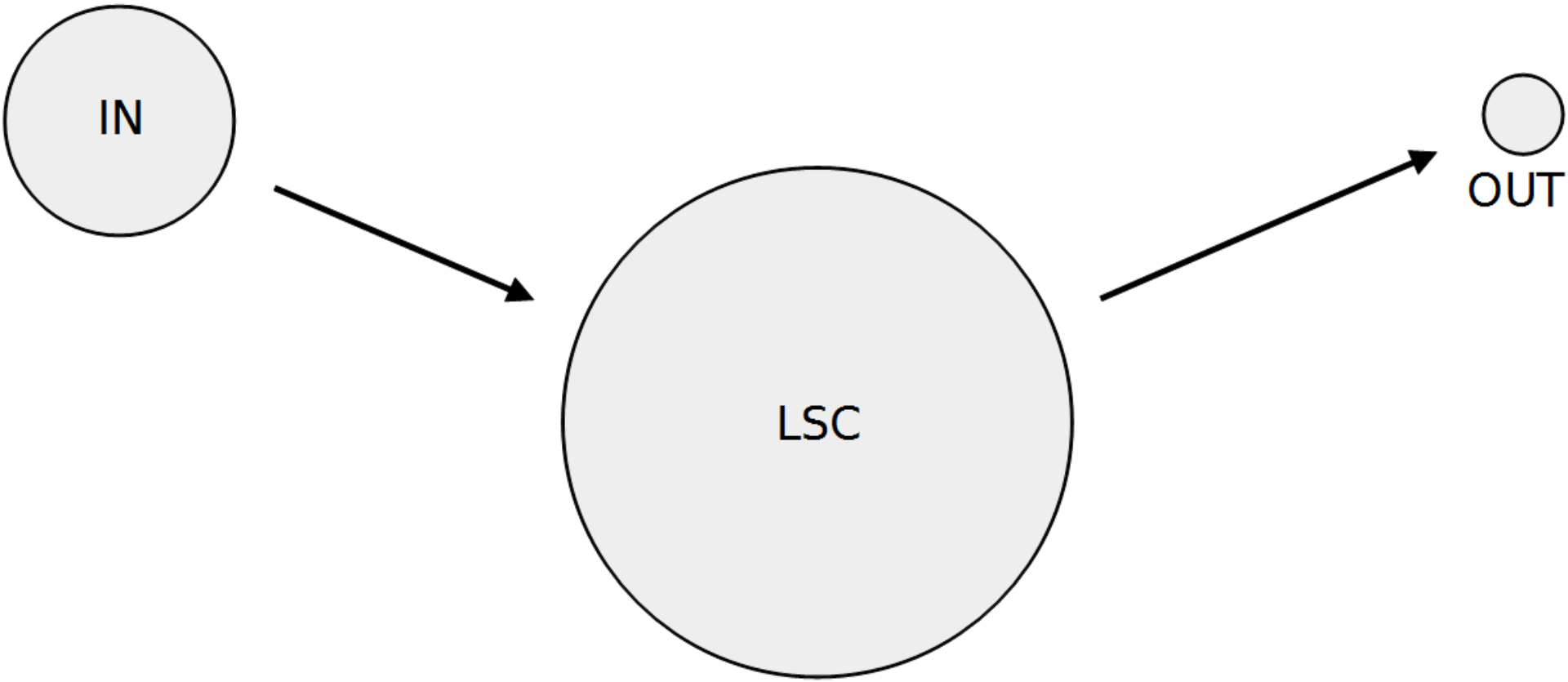
1. Collect the graph
2. Decompose the graph
3. Give a physical meaning to the decomposition

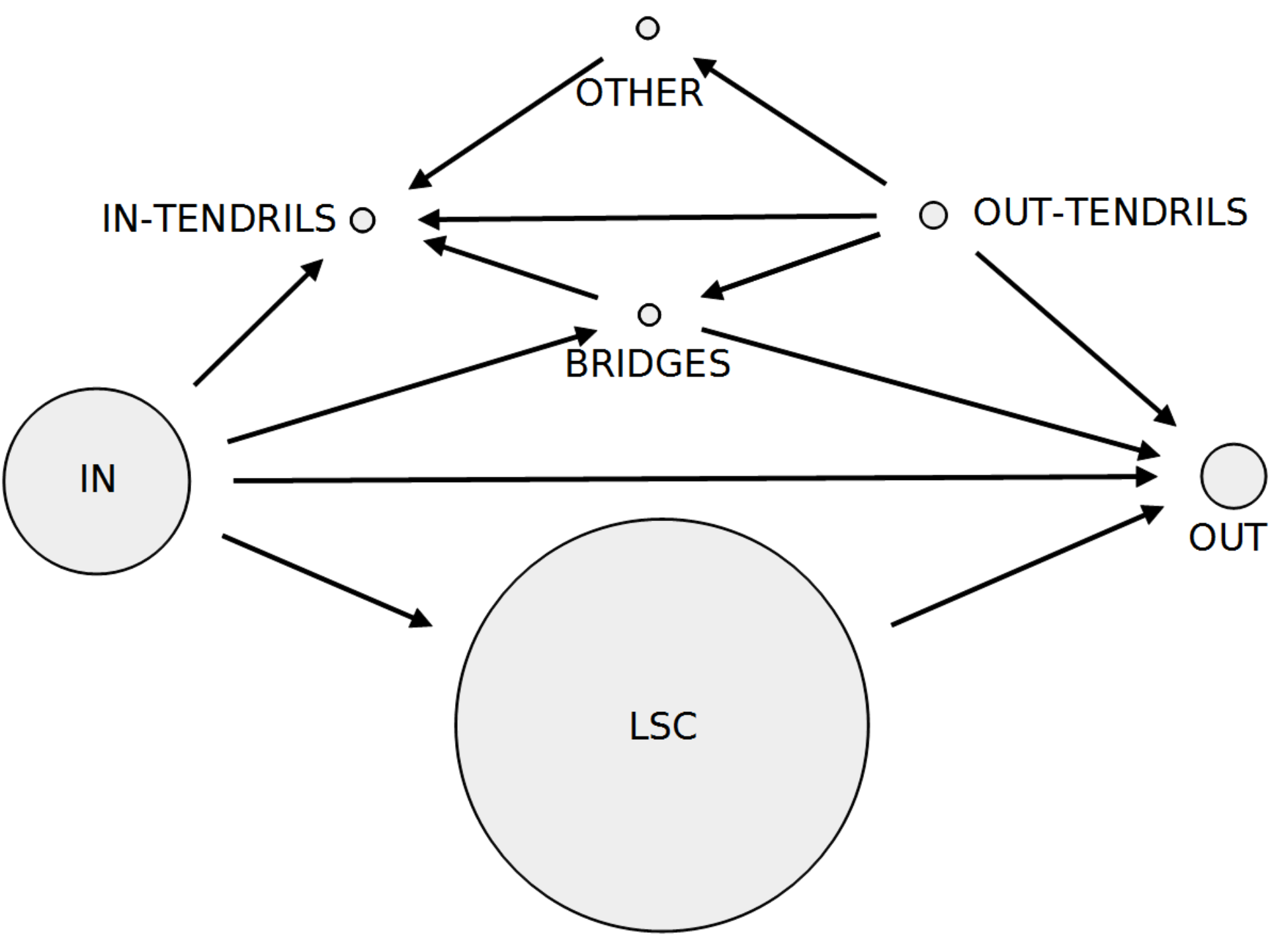
Macrostructure of the Twitter social graph

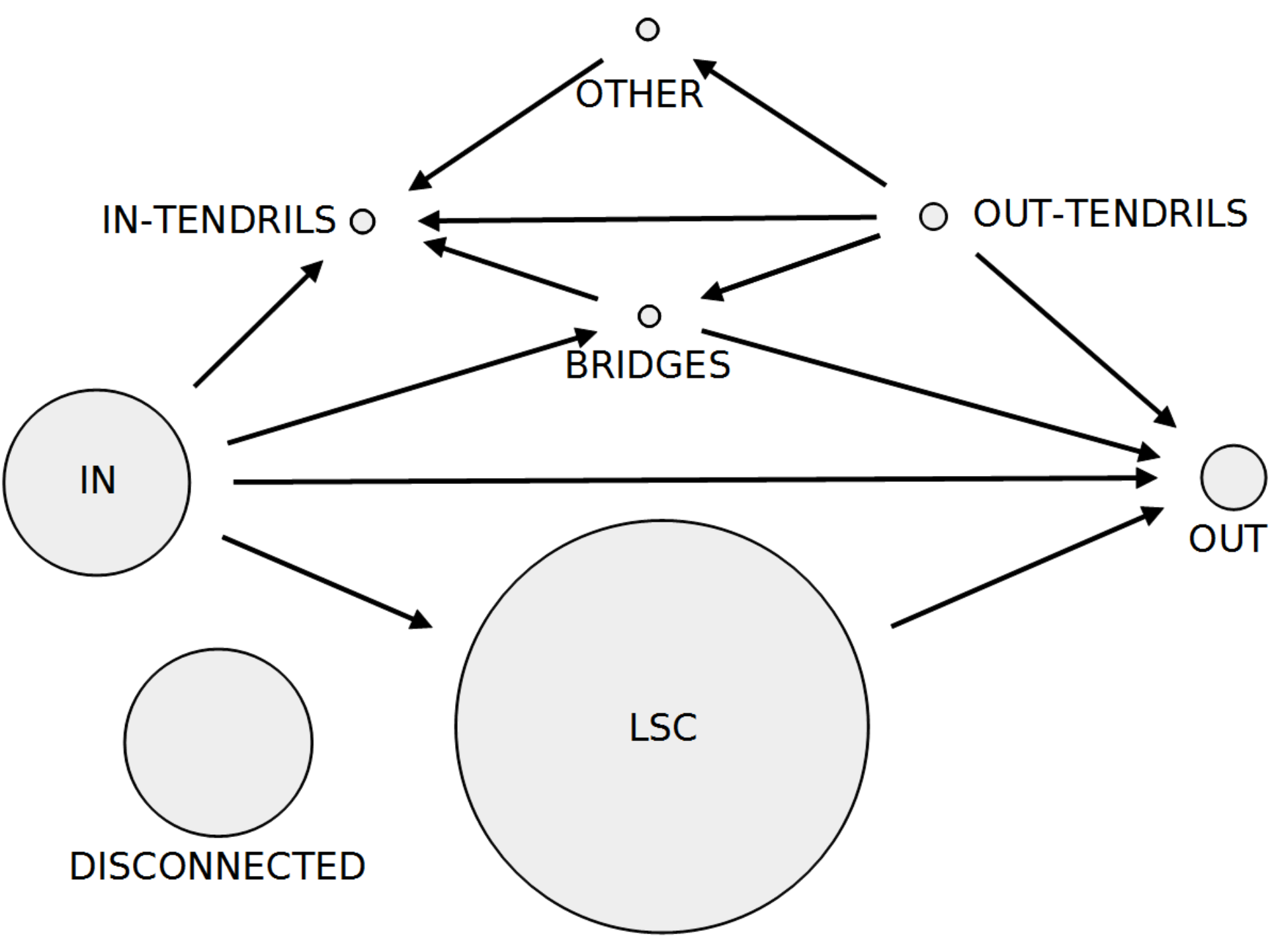


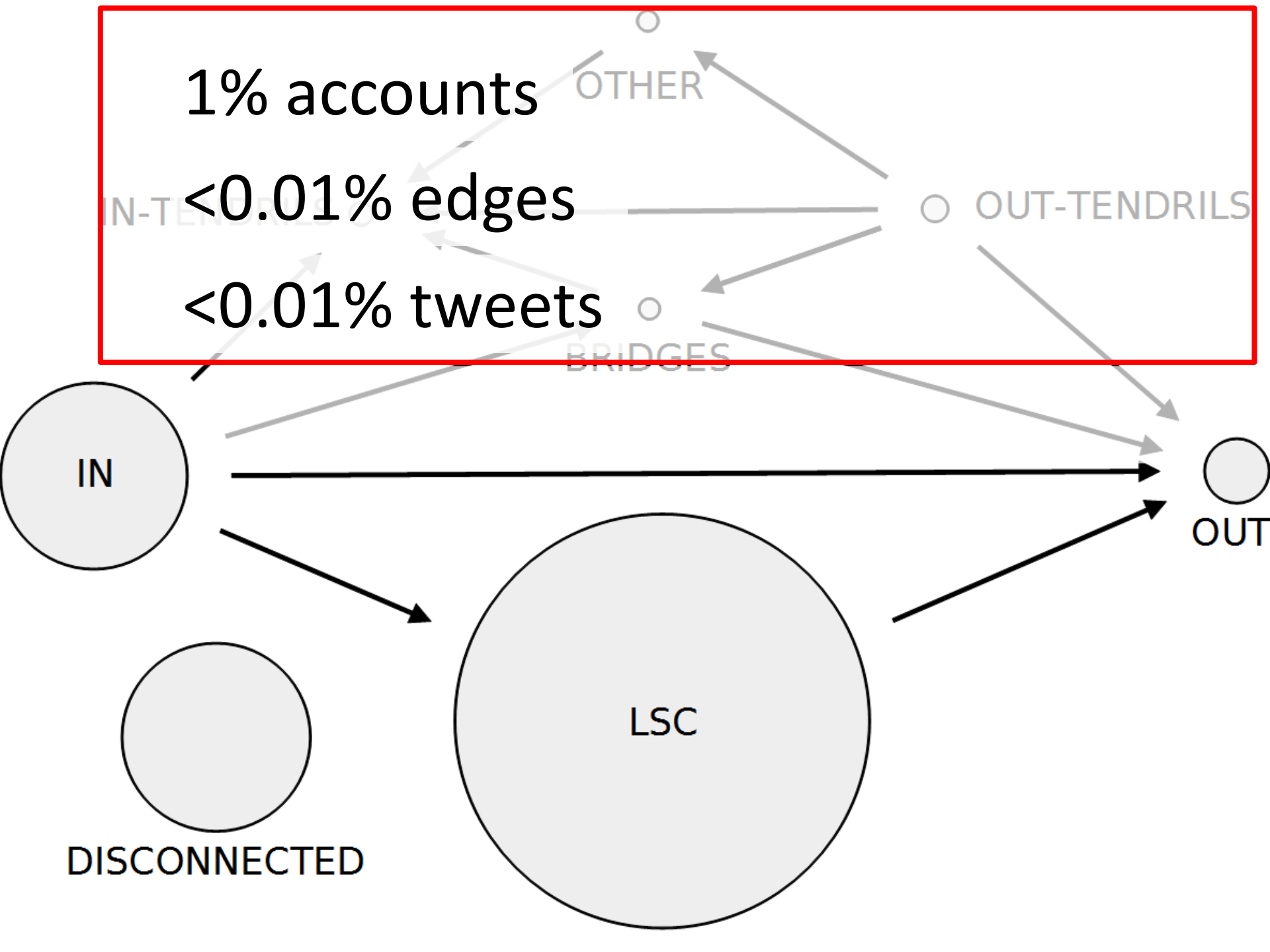

LSC


LSC
OUT


IN
LSC
OUT


OTHER
IN-TENDRILS
OUT-TENDRILS
BRIDGES
IN
OUT
LSC

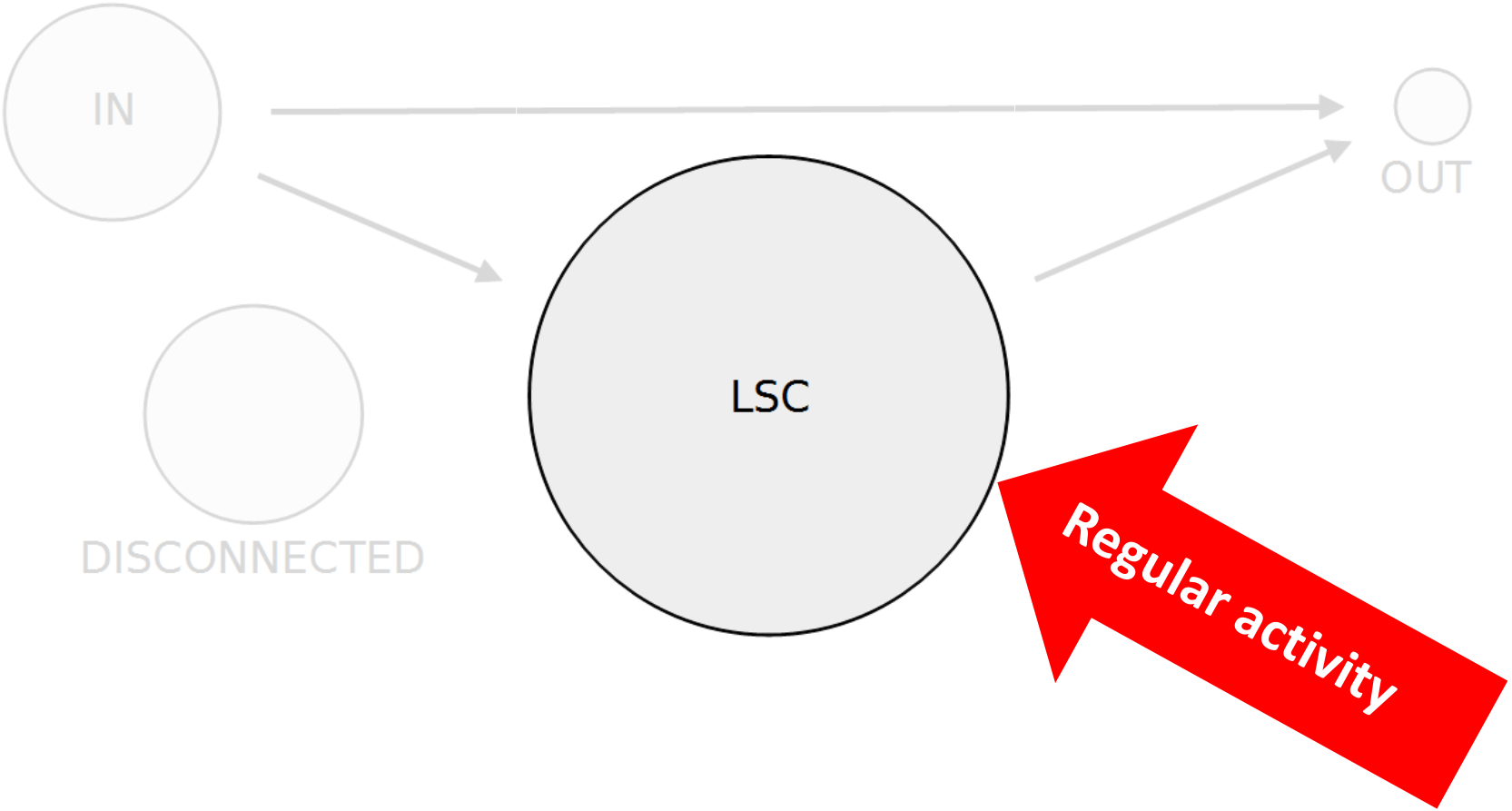

OTHER
IN-TENDRILS
OUT-TENDRILS
BRIDGES
IN
OUT
LSC
DISCONNECTED


1% accounts
<0.01% edges
<0.01% tweets
OTHER
OUT-TENDRILS
BRIDGES
IN
OUT
LSC
DISCONNECTED

98% tweets

98% edges

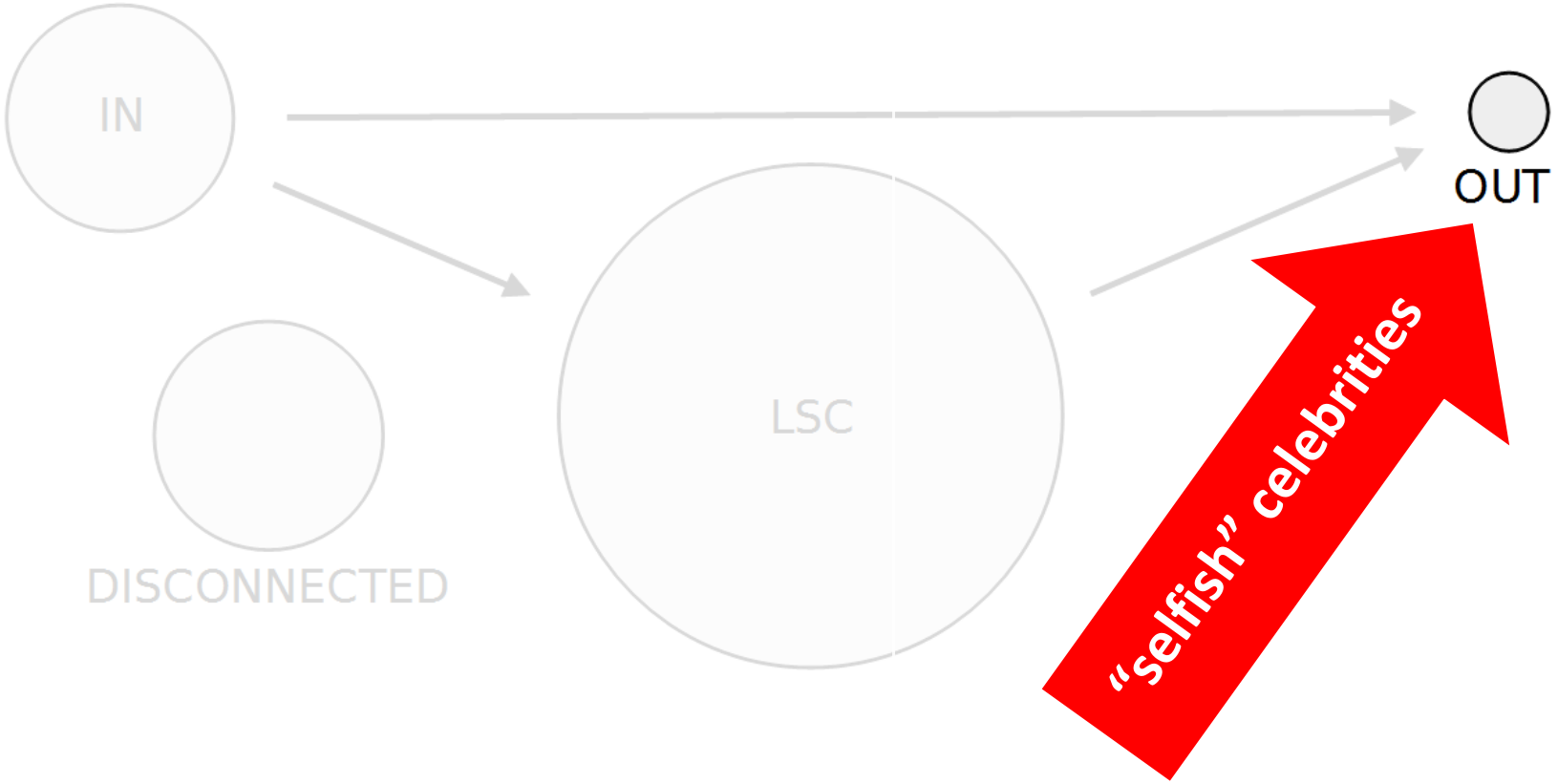
50% accounts



1,5% tweets

5,3% accounts

0% outgoing edges



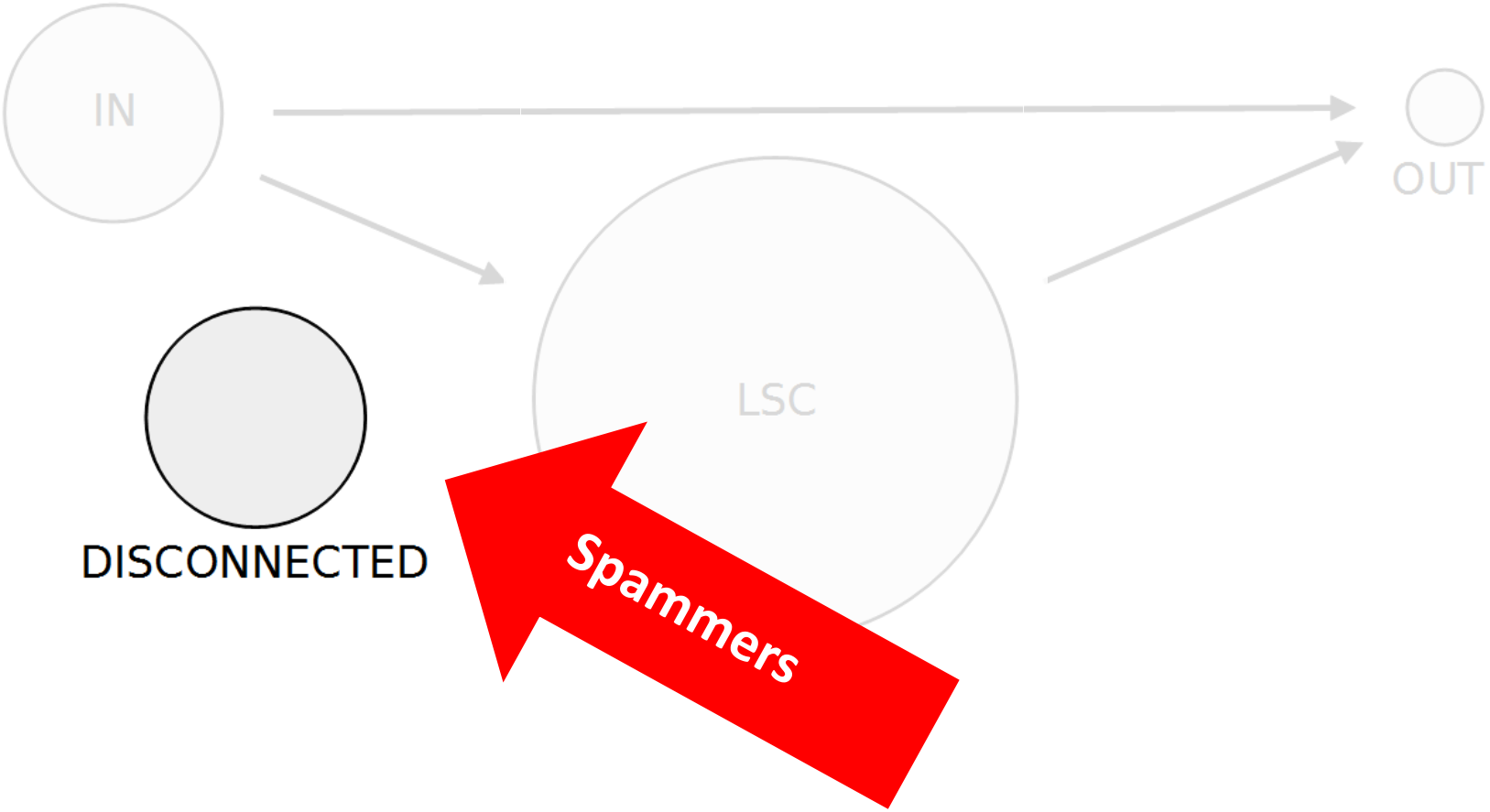
21,4% accounts

0,25% tweets

21,6% accounts

99% no edge

80% no tweet



Macroscopic Exploration of the Twitter Social Graph

Arnaud Legout

EPI DIANA, Sophia Antipolis

arnaud.legout@inria.fr

Annex 2
Credit

Credit

- *How to give a bad talk?* By David A. Patterson, Rolf Riedi, John Ousterhout, Tom Anderson
  - Browse google for an instance of the presentation
- *Presentation Zen* by Garr Reynolds
- *How to give a good research talk* by Simon Peyton Jones, Microsoft Research, Cambridge
- http://www.nanog.org/talkpointers.html

Credit

- Colleagues
  - Much better to be ashamed in front of a colleague than in front of 300 peers
- The wonderful and awful presentations I attended
- My students, their mistakes and their successes
- Many thanks to TCCC mailing list people who helped me fix typos in the slides and made good suggestions