

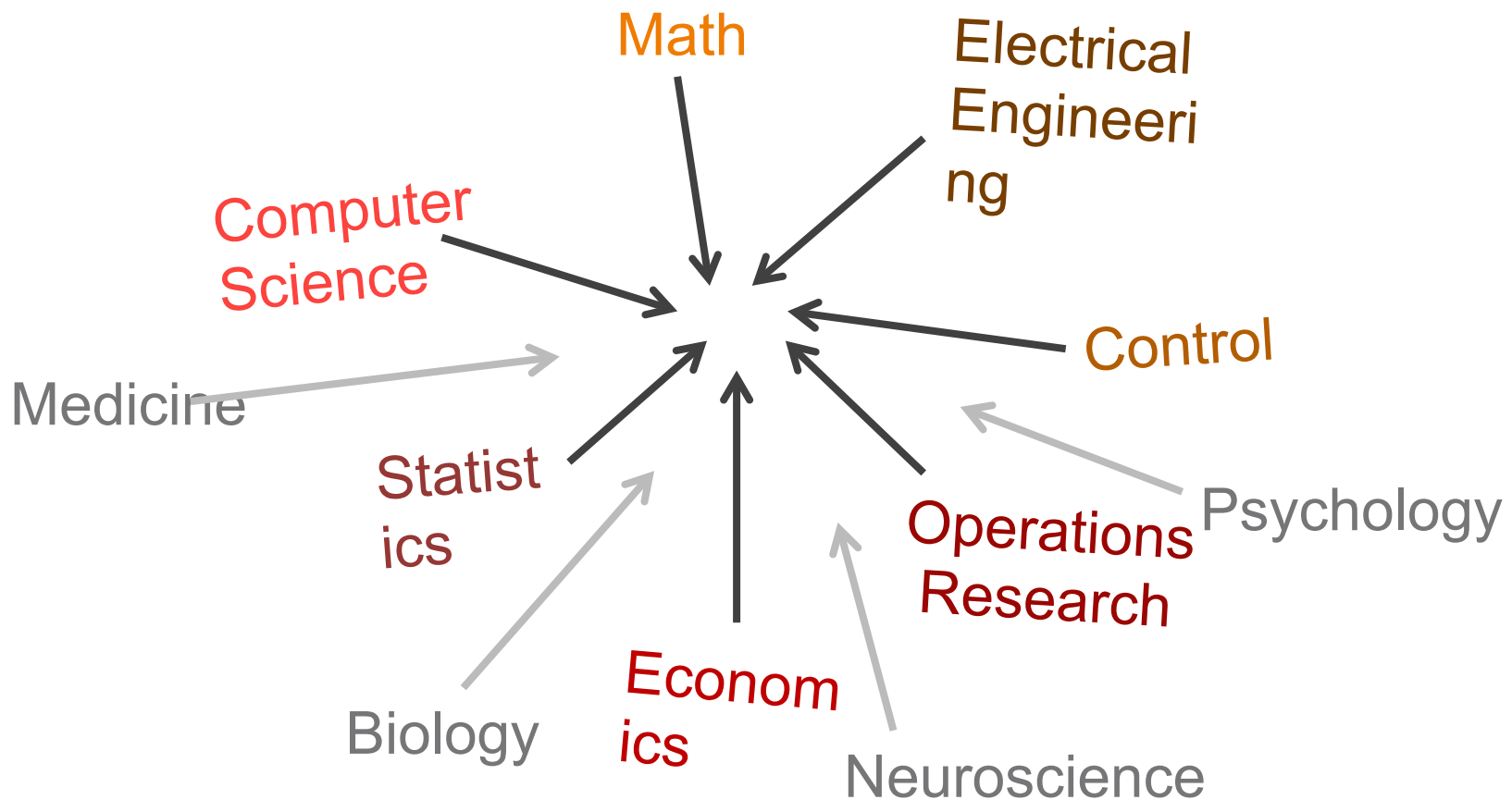
Final session: Computing and Mathematical Sciences

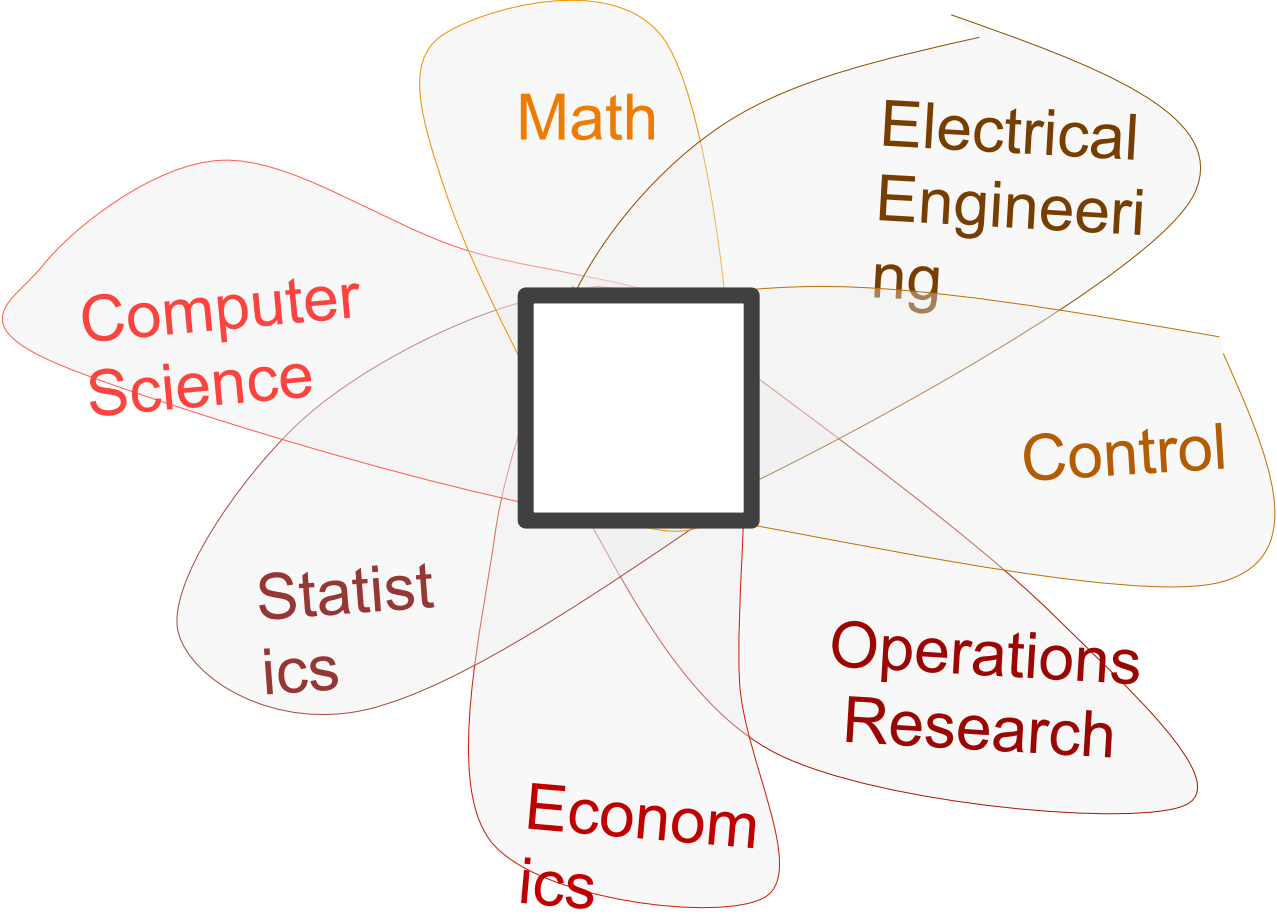
Goal: An introduction to,
advertisement for, &
call for

feedback on a new PhD program

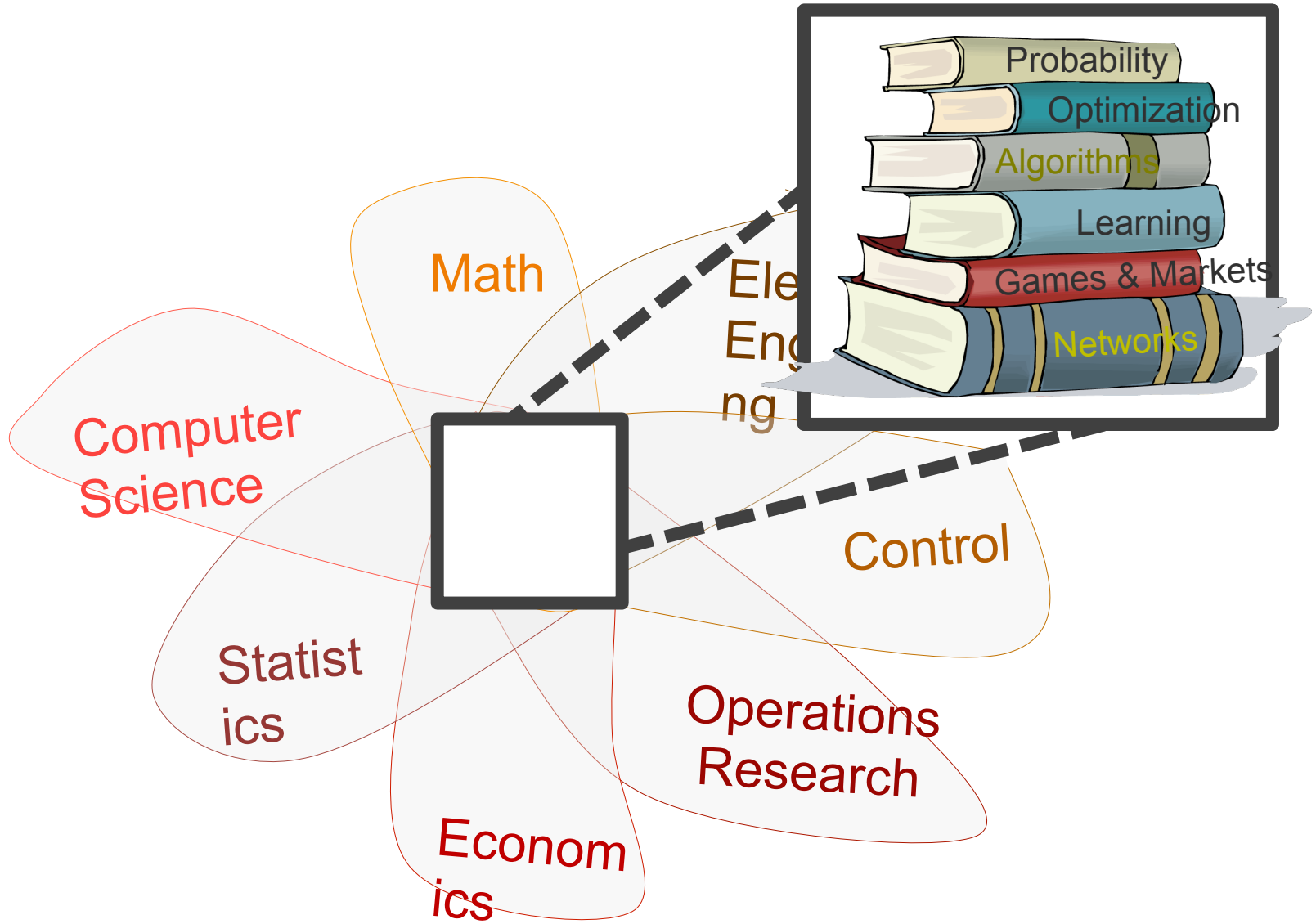
Why start a new PhD program?

We are in the midst of an unprecedented converg

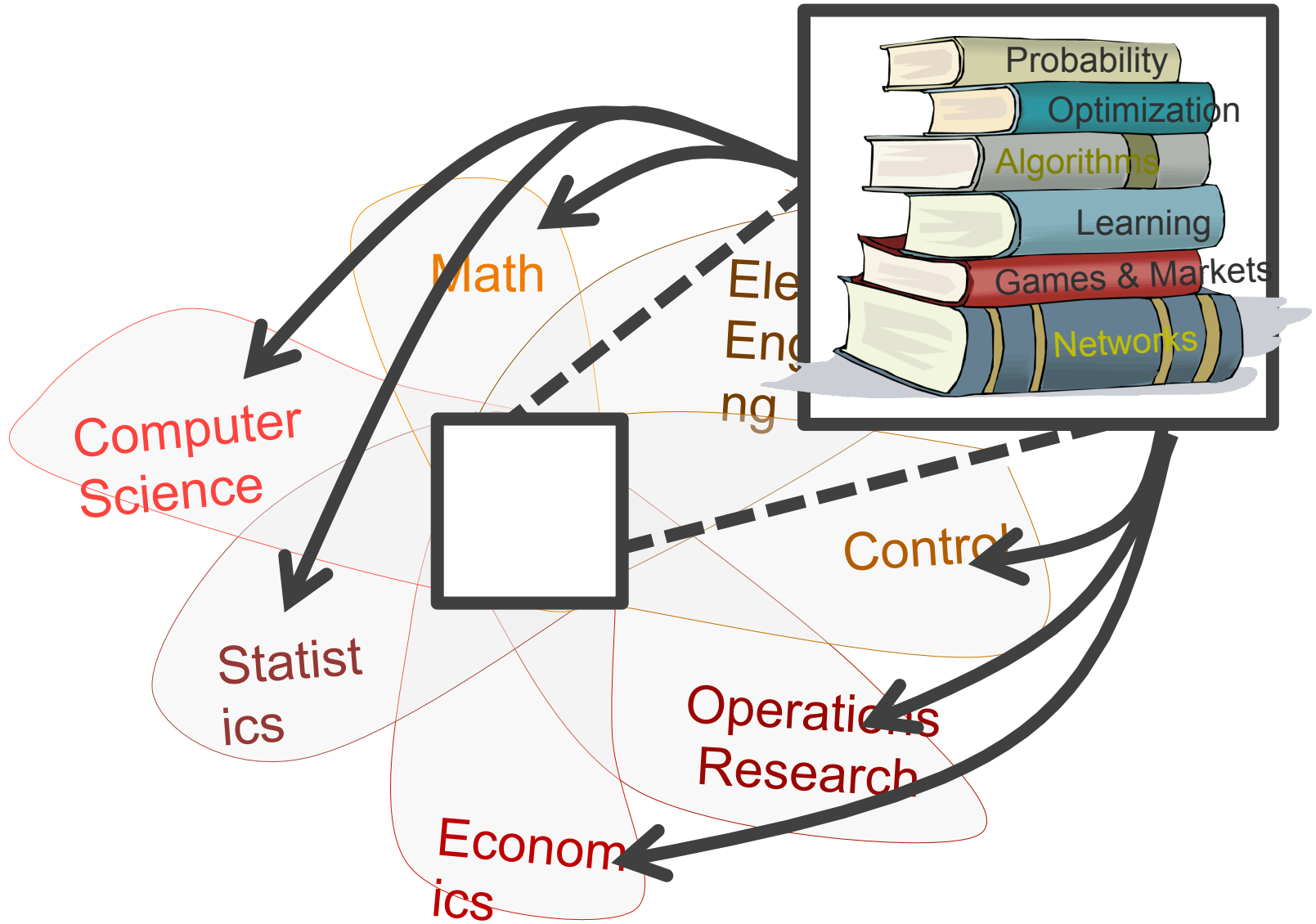




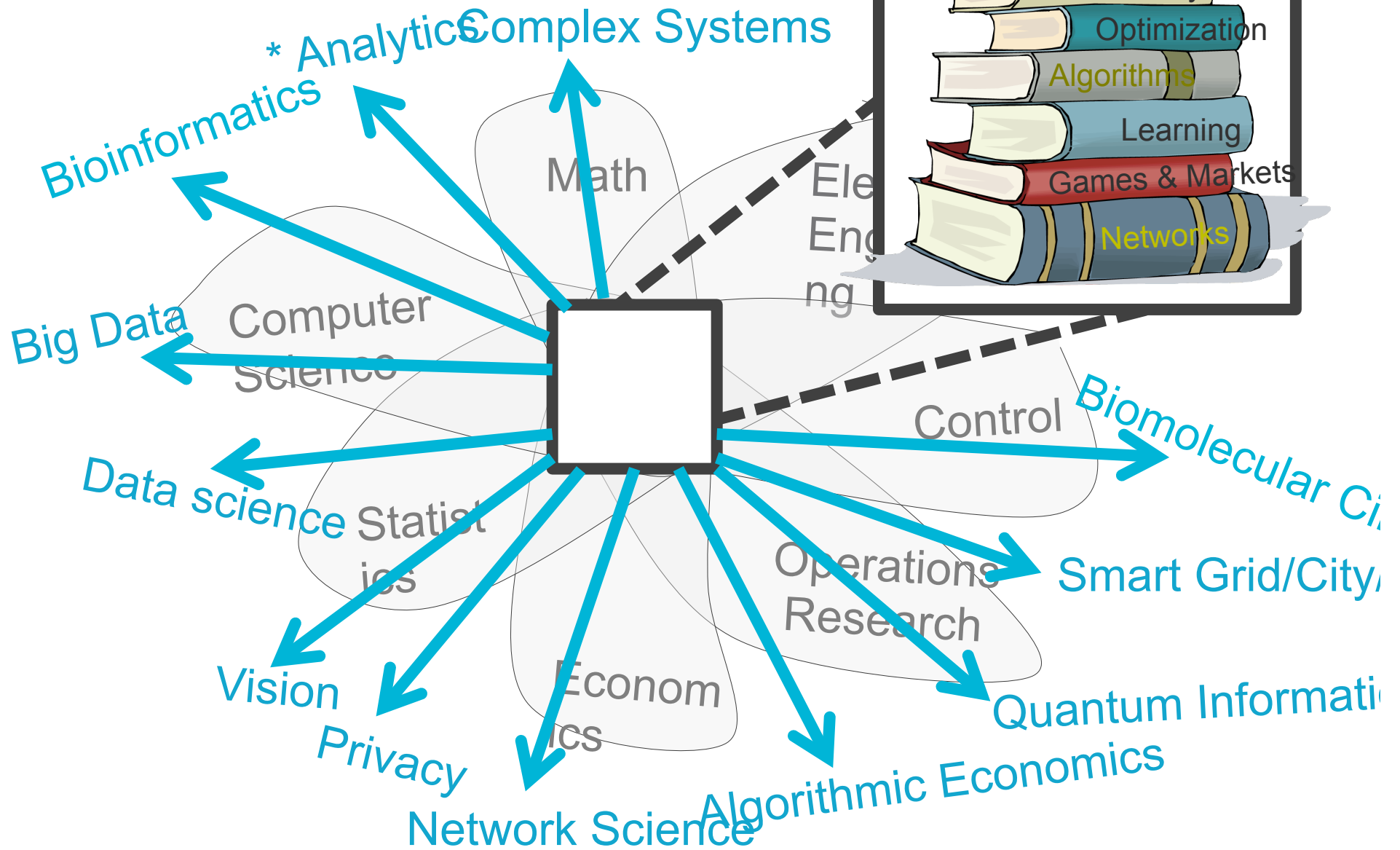
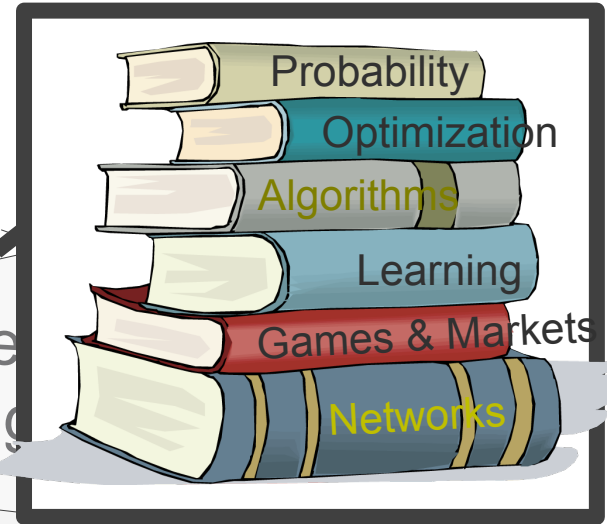
A new core has emerged



A new core has emerged



A new core has em



A new core has emerged

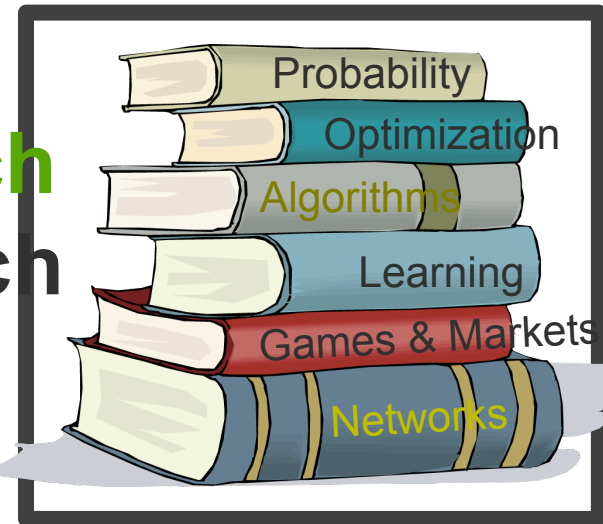


EE / CS / ~~Control~~ /

Traditional programs do not teach this core

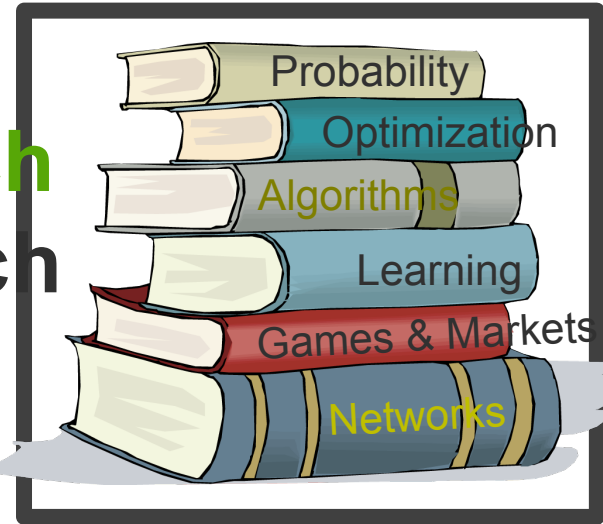
A key driver for **research**
and **education** at Caltech
(and CDS)

A new core has emerged



A new core has emerged

A key driver for **research** and **education** at Caltech



A new PhD program

The core is dominating recent hiring



Adam Wierman

Joel Tropp

Katrina Ligett

Venkat Chandrasekaran

Matt Elliot

Yisong Yue

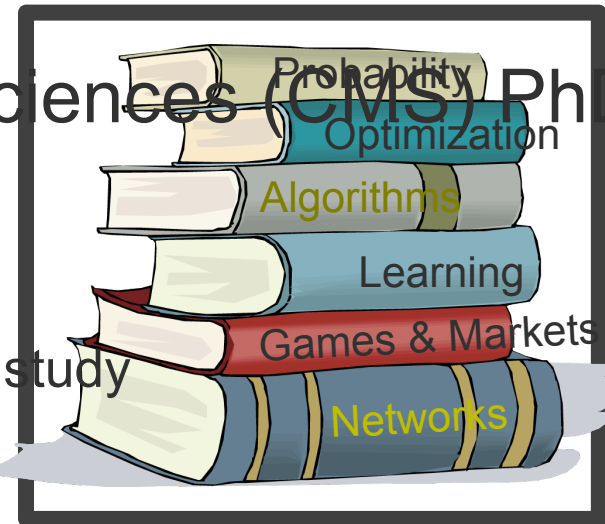
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The Computing & Mathematical Sciences (CMS) PhD

Core: Unique, interdisciplinary courses on

Breadth: Sample a few application areas

Depth: Choose a “focus” application area to study



Faculty involvement:

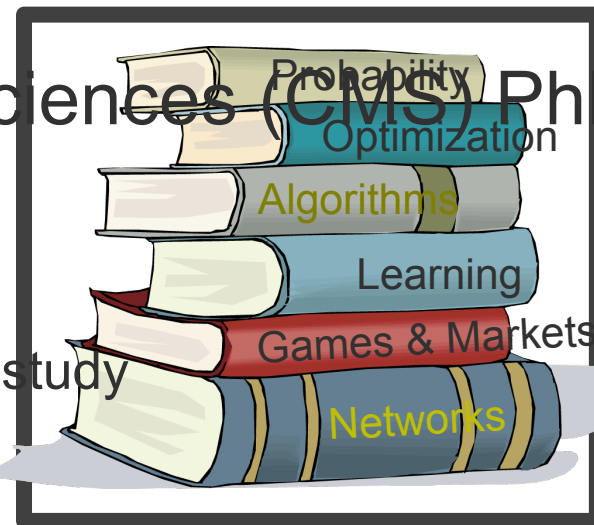
James Beck, Shuki Bruck, Oscar Bruno, Joel Burdick, Venkat Chandrasekaran, Mani Chandy, Mathieu Desbrun, John Doyle, Federico Echenique, Michelle Effros, Matthew Elliott, Ben Gillen, Babak Hassibi, John Ledyard, Katrina Ligett, Steven Low, Richard Murray, Houman Owhadi, Pietro Perona, Leonard Schulman, Peter Schroeder, Matt Shum, Omer Tamuz, Joel Tropp, Chris Umans, P. P. Vaidyanathan, Thomas Vidick, Adam Wierman, Yisong Yue.

The Computing & Mathematical Sciences (CMS) PhD

Core: Unique, interdisciplinary courses on

Breadth: Sample a few application areas

Depth: Choose a “focus” application area to study



This session:

Share “visions” behind CMS @ Caltech

1. Pietro Perona (Vision & Learning & Biology & ...)
2. Venkat Chandrasekaran (Optimization & Statistics & ...)
3. Steven Low (Energy & Optimization & Networks & ...)
4. Omer Tamuz (Networks & Economics & Math & ...)
5. Katrina Ligett (Privacy & Economics & Algorithms & ...)

...have your best undergrads apply!

