

# Project

## MS-E1603 Random Graphs and Network Statistics

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### Description

The project work will focus on a subject chosen by the student, among a list of themes proposed by the teachers. This is a reading exercise where a group of 1–2 students reads a selected research article related to the course theme. Based on the article, the group (i) writes an **essay** of 3–4 pages and (ii) prepares a 15–20 min **presentation** where the following four key points will be discussed:

- Objective: What is the goal of the research?
- Motivation: Why is the research worth carrying out?
- Results: What are the main results obtained?
- Evaluation: What is your own estimate of the usefulness of the results?

### Important dates

- **Tue 6 Oct 2020 12:00.** You should email to the lecturer and teaching assistant a copy of the article that you propose to read.
- **Mon 19 Oct 2020 13:00–16:00.** Project workshop where presentations are given. You should email your written essay as pdf attachment to the lecturer and the teaching assistant.

### Choosing an article

You are expected to select an article from the sources listed below. In a special case you might propose an article of your own choice from an external source, but your proposal must be confirmed by the lecturer before starting. Some guidelines and requirements:

- The article must have something to do with random graphs and network statistics, and it must contain some MSc level mathematics (research articles solely based on numerical experiments or simulations are not allowed).
- You can also present a selected section of a longer research article, or a book.

- You do not need to read the full article page by page (technical mathematical proofs can be omitted).
- Ask the teachers for advice if you are not sure what would be a good article to read.

## Recommended papers

Topical and interesting articles well aligned with the course themes are presented in the following conferences:

- WAW 2020  
<https://math.ryerson.ca/waw2020/>
- NetSCI 2020  
<https://netsci2020.netscisociety.net>
- COSTNET 2020  
<https://www.wisostat.statistik.uni-muenchen.de/forschung/sna/costnet2020/>

You can browse the talk titles in the conference schedules, and then search for a preprint with the same title from open preprint servers for the associated detailed paper.