## STAT 563 - Term Paper

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## Data:

- Global Burden of Disease (GBD) 2019 Estimates
  - Total Fertility Rate
  - Contraceptive met-need
  - Female educational attainment
- IHME doesn't publish their projections for contraceptive met-need and female education. In the Github repo, they retrieve that data from an internal database.
- As a result, their codes are not reproducible for estimating Complete Cohort Fertility at age 50.

## Strategy:

- Using IHME's TFR estimates
- Fit an autoregressive (AR 1) model on 1980-2009 data.
- Forecast for 2010-2019
- Compare the model with and without covariates
- European Union Countries
- I will use AR models because most of the countries are in Phase III.