

Cascading Failures in networks (power grid)

Literature

Small vulnerable sets determine large network cascades in power grids

Yang Yang, Takashi Nishikawa, Adilson E. Motter
Science 358, 886 (2017)

Cascading Failures as Continuous Phase-Space Transitions

Yang Yang, Adilson E. Motter
PRL 119, 248302 (2017)

Emergent Failures and Cascades in Power Grids: A Statistical Physics Perspective

Tommaso Nesti, Alessandro Zocca, Bert Zwart
Phys. Rev. Lett. 120, 258301 (2018)

Any other papers addressing the similar topic can be used/presented.

The following concepts should be explained:

- Select one of the suggested papers or find similar papers addressing the disturbance propagation in power grid. You could also consider cascading failures in other social networks.
- Do the similar simulations for synthetic networks. If you are interested in this topic we could have a talk for the simulation part.