Transmission: Insights on COVID-19 ADDITIONAL RESOURCES

• Lauren Ancel Meyers on epidemiological modeling, "Preventing The Next Pandemic"

PART 1 PART 2

• Papers by a team of former SFI post-docs Sam Scarpino & Laurent Hébert-Dufresnes, et al.:

They interact but we model them often in a vacuum: https://www.pnas.org/content/early/2015/07/16/1507820112.abstract
https://www.nature.com/articles/s41567-020-0791-2

Human behavior can have unexpected consequences: https://www.nature.com/articles/nphys3832

Regarding covid, heterogeneity of infections and social structure: <u>https://arxiv.org/abs/2003.05924</u> <u>https://arxiv.org/abs/2002.04004</u>

• Complexity Explorer, our online education platform, offers some great relevant learning resources. Here are links to three free courses that help people learn to model complex systems such as disease

Intro to Complexity | Fundamentals of NetLogo | Agent-Based Modeling

• Our friend Dirk Brockmann has made these two interactive "explorables" to understand disease transmission and herd immunity: <u>Transmission</u> | <u>Herd Immunity</u>

• SFI External Professor Scott E. Page launched a free online prediction market for various second-order effects of COVID-19 he is using as a teaching tool to help people learn about complex systems:

https://sites.google.com/umich.edu/2020predictionmarket/home

• Friends of SFI worth following on Twitter as premiere reliable resources for real-time info:

<u>Marc Lipsitch</u> | <u>Carl T. Bergstrom</u> <u>Samuel V. Scarpino</u> | <u>Laurent Hébert-Dufresne</u>