

PHYSIKALISCHES KOLLOQUIUM

Sommersemester 2021

Das Kolloquium findet (soweit unten nicht anders angegeben) jeweils montags **jeweils montags um 17:15 Uhr online via Zoom** statt.

(Der jeweilige Link wird noch zur Verfügung gestellt.).

26.04.2021

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Spreading dynamics of COVID-19 and its mitigation

Abstract

How can we infer the spreading of neural activity in the brain? And how can these approaches be used to infer the spread of SARS-CoV-2? We recapitulate the basic principles of spreading dynamics, its role in shaping network dynamics, and its ability to describe COVID-19. We show how to design COVID-19 mitigation strategies, and derive a metastable state, which could greatly facilitate mitigation.

Relevant references:

Contreras et al., Nature Communications, 2021

<https://www.nature.com/articles/s41467-020-20699-8>

Contreras et al., arxiv

<https://www.medrxiv.org/content/10.1101/2020.12.10.20247023v1.abstract>

Dehning et al., Science, 2020

<https://science.sciencemag.org/content/369/6500/eabb9789.abstract>

Wiltling & Priesemann, Nat Commun, 2018

<https://www.nature.com/articles/s41467-018-04725-4>

Für die Dozentinnen bzw. Dozenten der Fakultät

Prof. Dr. Hankiewicz, Prof Dr. Höfling, PD. Dr. Meyer, Prof Dr. Sing und Hr. Frerichs