A U S H A N G

FREIE UNIVERSITÄT BERLIN

Fachbereich Mathematik und Informatik

Promotionsbüro, Arnimallee 14, 14195 Berlin

D I S P U T A T I O N

Montag, 7. November 2016, 13.00 Uhr

Ort: Raum 108/109, Arnimallee 6, 14195 Berlin

Disputation über die Doktorarbeit von

Frau Iliusi Vega del Valle

Thema der Dissertation:

Reconstruction and analysis of the state space for the identification of dynamical states in real-world time series

Thema der Disputation:

Opinion spreading on coevolving networks

Die Arbeit wurde unter der Betreuung von **Prof. Dr. Chr. Schütte** durchgeführt.

Abstract: Opinion dynamics – the formation and evolution of opinions in a population – is driven by forces like influence, homophily, reciprocity and structural balance, among others. The simplest model to study these properties is the voter model, developed by Holley and Liggett in 1975 [1]. There have been various modifications to this model. Of particular interest, is the study of coevolving networks, where the state of the nodes and the topology of the network interact with each other.

In this talk, I will cover the main properties of coevolving networks and explain the different forces governing opinion dynamics. I will guide my talk with an article of Malik, Shi, Lee and Mucha from 2016 [2], where the authors introduce a two-opinion coevolving model that reinforces transitivity in order to create a more realistic model.

[1] Richard A.Holley and Thomas M.Liggett.Ergodic theorems for weakly interacting infinite systems and the voter model. The Annals of Probability, 3(4):643–663, 1975.

[2] Nishant Malik, Feng Shi, Hsuan-Wei Lee and Peter J. Mucha.Transitivity reinforcement in the coevolving voter model. arXiv:1608.03337, 2016.

Die Disputation besteht aus dem o. g. Vortrag, danach der Vorstellung der Dissertation einschließlich jeweils anschließenden Aussprachen.

Interessierte werden hiermit herzlich eingeladen

Der Vorsitzende der Promotionskommission
Prof. Dr. Chr. Schütte