1 Themen Masterseminar Wintersemester 2017-18

betreut durch Uwe Thiele (UT)[1]

1.1 Störungstheorie für integrable Systeme - Stabilisierung eines Pendels durch Oszillationen/Rauschen *already taken*

Perturbation theory for integrable systems - Stabilisation of pendulum through noise/oscillations

Literatur: [1, Kap. 6.1/6.2] and references therein

1.2 Raum-zeitliche Phänomene in komplexen Systemen mit Zeitverzögerung

Spatio-temporal phenomena in complex systems with time delays
Literatur: [2, 3]

1.3 Clusterwachstum auf Oberflächen

Cluster growth on surfaces
Literatur: [4] and references therein

1.4 Wie bricht man die Galilei-Invarianz? – Das Toner-Tu Modell für schwärmende Teilchen

How to break the Galilean invariance – The Toner-Tu model for swarming particles **Literatur:** [5, 6, 7]

1.5 From the real to the complex Swift-Hohenberg equation

Von der reellen zur komplexen Swift-Hohenberg Gleichung **Literatur:** [8, Chap. 9.4 of],[9, 10]

[1] u.thiele@uni-muenster.de

References

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