

**Themenvorschläge für das Masterseminar “Theorie komplexer Systeme”**  
**– Wintersemester 2017/2018 –**

**1) Komplexe Plasmen**

Complex plasmas

Literatur: [1, 2]

**2) Phasenfeldkristallmodelle**

Phase field crystal models

Literatur: [3, 4]

**3) Landau-Theorie der Phasenübergänge**

Landau theory of phase transitions

Literatur: [5–8]

**4) Isotrop-nematischer Phasenübergang**

Isotropic-nematic phase transition

Literatur: [9, 10]

**5) Suprafluidität in Bakteriensuspensionen**

Superfluidity in bacteria suspensions

Literatur: [11–13]

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- [1] G. E. Morfill and A. V. Ivlev, *Reviews of Modern Physics* **81**, 1353 (2009).
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