

Material for Week 14

Physics 4488/6562: Statistical Mechanics

<https://sethna.lassp.cornell.edu/Teaching/562/>

Exercises due Mon. May 09

Last correction at January 11, 2022, 9:15 pm

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This homework is due next Monday, the last day of class.

The exercises with numbers N1.xxx are to be found in <https://sethna.lassp.cornell.edu/StatMech/NewStatMechExercises.pdf>

The final exam will be distributed on XXX, and is due XXX.

Monday

In-class question: [12.29](#) *The onset of chaos: lowest order RG*

Wednesday

Read: ‘Crackling wires’, James P. Sethna, *Science*, **318**, 207-8 (2007), and ‘Crackling crossover’, James P. Sethna, *Nature Physics*, **3**, 518-9 (2007),

Pre-class question: [12.21](#) *Earthquakes and wires*

In-class question: [12.31](#) *Singular corrections to scaling*

Friday

Read: ,

Monday

Read: ,

Exercises for everyone (4488 and 6562)

[12.33](#) *Pandemic.*

Exercises for Graduate Course (6562 only)

[12.32](#) *Conformal invariance.* Hints are available in Python and Mathematica at <https://sethna.lassp.cornell.edu/StatMech/EOPCHintsAndMaterials.html>

[N1.6](#) *Beer and rigidity: jamming.*