

Chaotic Dynamics: Course Syllabus

Fall 2019

Class

- Tuesday, Thursday: 2:00 P.M. – 3:15 P.M.
- Room PHYS 1219 (PHYS)

Instructor

- Edward Ott
- Room 3329, AVW Building
- Phone: 405-5033 (Office)
- edott@umd.edu

TA

- Amitava Banerjee
- Room 3353, AVW Building
- Phone: (240) 413-3686
- amitavab@umd.edu

Course Webpage: ELMS Canvas – Physics 715

Course Content: One-dimensional maps, strange attractors, fractal dimension, embedding, Lyapunov exponents, entropy, controlling chaos, fractal basin boundaries, chaotic scattering, Hamiltonian chaos, quantum chaos, chaos in fluids

Textbook: “Chaos in Dynamical Systems” by E. Ott (Cambridge University Press, 2nd edition)

Homework/Exam

- Homework set 1: due Oct. 3
- Homework set 2: due Nov. 5
- Exam: Nov. 14
- Homework set 3: due Dec. 5

Grading

- Homework: 50%
- Exam: 50%

