

Possible topics for papers and presentations.

Simon, Barry, Some pictorial compactifications of the real line. Amer. Math. Monthly 76 1969 536-538.

Poincare- Benixson Theorem. References. Ghys. Peixoto. Arnold.

Grayson and Pugh: Critical sets in R^3 <https://link.springer.com/content/pdf/10.1007/BF02699187.pdf>

Ed Moise:

A) Theorem that any two Cantor sets are homeomorphic. (Ref: Moise.)

B) Antoine's Necklace.

C) Theorem that the Cantor set maps onto any compact Hausdorff space.

Meiss: Phys Rev Lett survey on Standard Map or Twist Maps.

Amy Wilkinson , (a survey), Bulletin AMS.

<https://www.math.uchicago.edu/~wilkinso/papers/BulletinProofs.pdf>

Quite current. Lyapanov exponents. Ergodicity, etc.

Delshams, Amadeu(E-UPB-A1); de la Llave, Rafael(1-TX); Seara, Tere M.(E-UPB-A1) Orbits of unbounded energy in quasi-periodic perturbations of geodesic flows. (English summary) Adv. Math. 202 (2006), no. 1, 64-188.

The Rock Paper Scissors paper ,(Barry Sirnevo game): <http://aimsciences.org/journals/pdfs.jsp?paperID=14689> ■

Shrodinger Operators and Dynamics:

<https://arxiv.org/pdf/1410.2445.pdf>

papers by Avila and others.