mathematical methods - week 15

What is ‘chaos’?

Georgia Tech PHYS-6124

No Homework HW #15 due never, not graded this week

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edited November 25, 2020

Week 15 syllabus Tuesday, November 24, 2020

The fastest way to watch any week's lecture videos is by letting YouTube run the course playlist (click here).

- *Clip 1 - what is 'chaos'? how an applied mathematicians thinks about it (12 min)*
- *Clip 2 - chaos for field theorists, 3rd millennium, lattice formulation: exponentially many distinct walks through Bernoullistan. (22 min)*
- *Clip 3 - periodic orbit theory. How come Hill determinant counts periodic points? (12 min)*
- *Clip 4 - chaos for a field theorist : think globally, act locally (6 min)*
- coin toss

Optional reading

- *Spatiotemporal cat and the end of time*
- *Herding cats: a chaotic field theory*
- Turbulence in spacetime : website, talks
- *Rant - E&M exam traumatized; on the necessity of E&M exams; Bologna and the necessity of child abuse, generation to generation; no Jonestown Colony, please; Jaques Laskar's miracle - we are here because we have our Moon; working for the "industry", by intimidating children with zeta functions; working for organized crime AKA hedge funds. (23 min)*