Interdisciplinary Collaborations with Physicists (and Biologists)

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How can I find a collaborator?
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- Interesting problem
- Large Interdisciplinary Conferences
  - APS-DFD
  - SICB
- Smaller conferences at Math Institutes
  - IPAM (UCLA), BIRS (Banff), IMA (Minnesota)
- Conferences in the other field
- Student exchange
Establishing Communication
Establishing Communication

- Foundation
  - Listening
  - Respect
Establishing Communication

• Foundation
  – Listening
  – Respect

• Common Values
  – Belief in collaboration
    • Contributions of each collaborator
    • Contributions from each discipline
Establishing Communication

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• Common Values
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• Benefits
  – Aware of assumptions
  – Models, problem-solving techniques
  – Perspectives
Establishing Communication

- Weekly communication is ideal
- Video chat
- Journal club
- Visits
Funding
Funding

• Grant-writing can facilitate discussion and focus research goals

• Funding agencies
  – National Science Foundation (FRG)
  – Research Corporation (Physics)
  – Center for Environmental Studies (Biology)
  – HHMI (Biology and Computer Science)
Tenure considerations
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- Choice of funding agency
- PI or co-PI?
- Where you publish
- What conferences you choose to present your work
- Whether your dept values interdisciplinary and collaborative work
- Which students you recruit, fund
Fun!