



Magnetic Granular Media

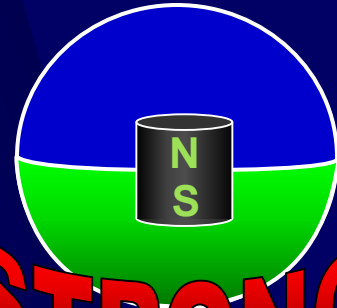
Pattern Formation and
Segregation

Our Particles

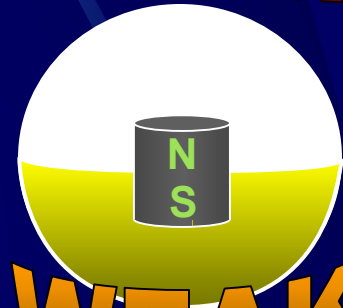
- Magnetic marbles
- 3 different particle types



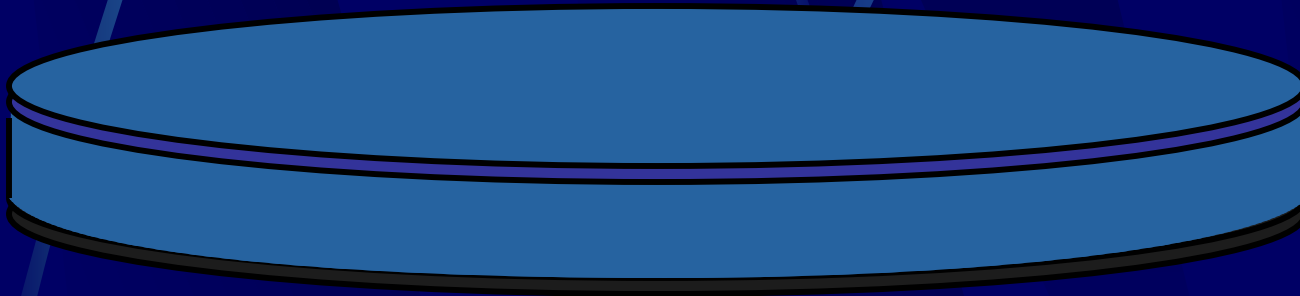
LONG



STRONG



WEAK



Purpose for the Experiment

- Characterize segregation rates
- Pattern formation
- How particle types and acceleration effect segregation rates and pattern types

Applications

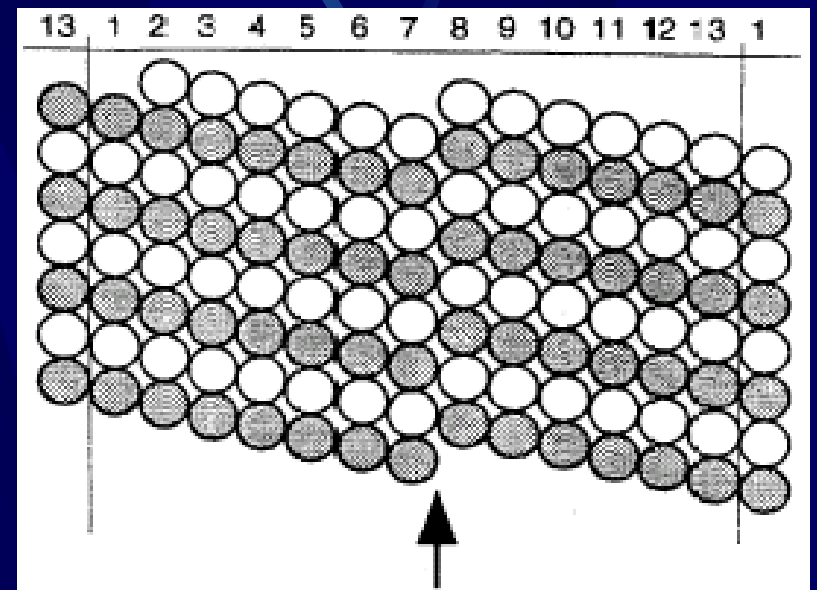
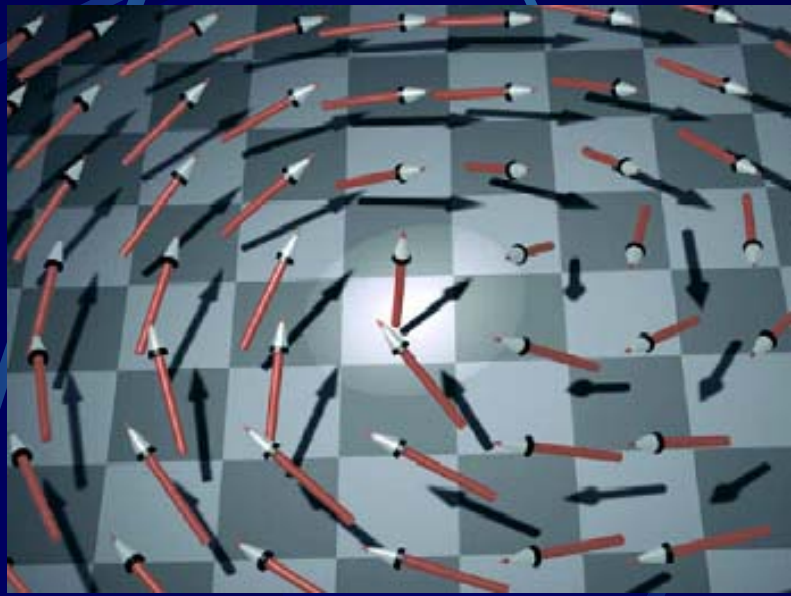
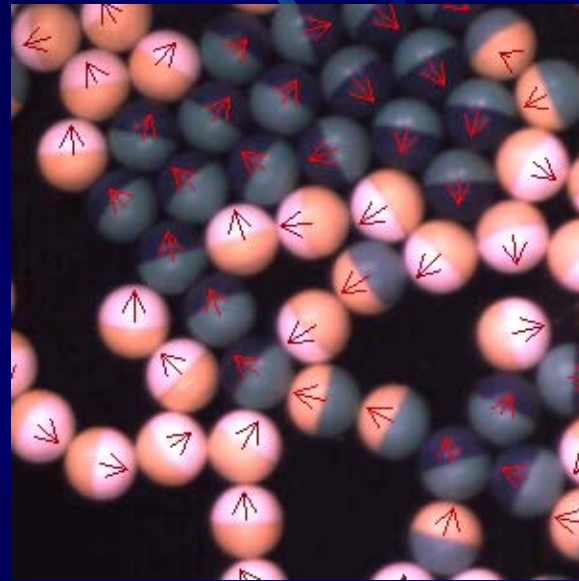
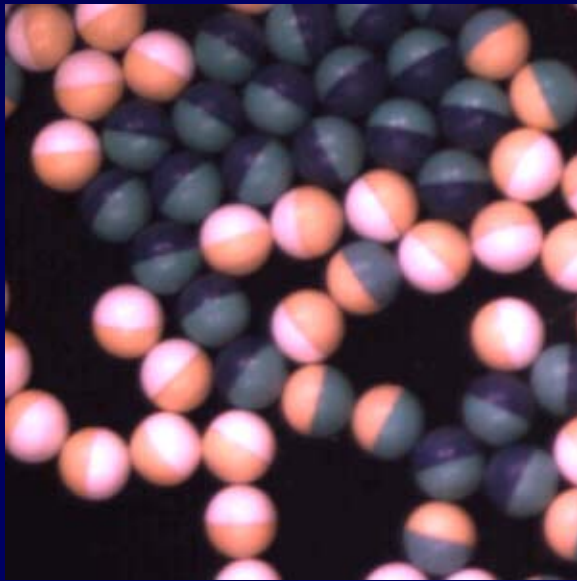
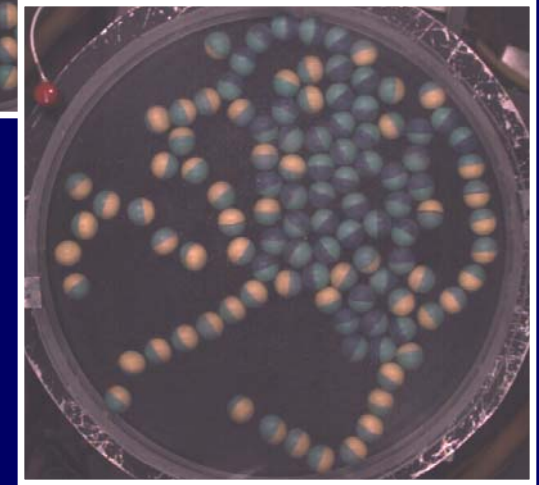
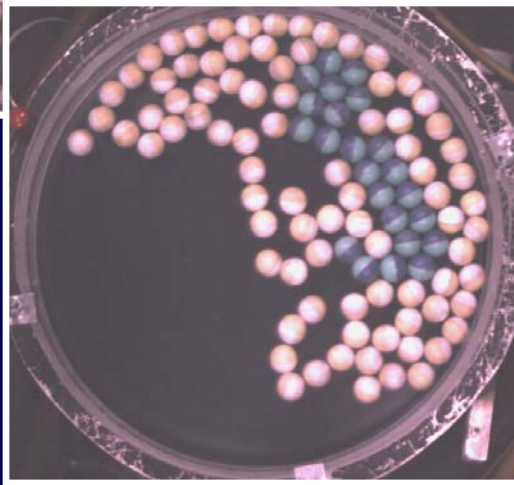
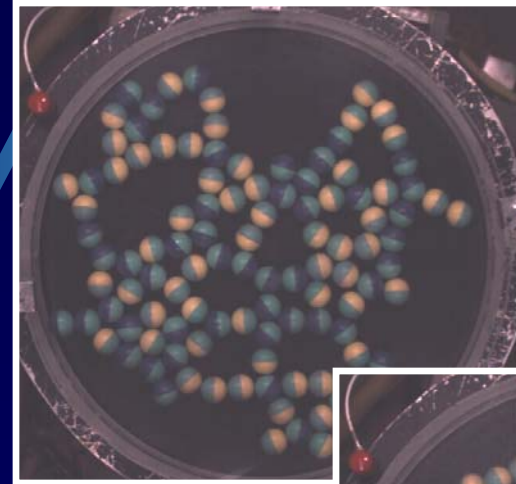
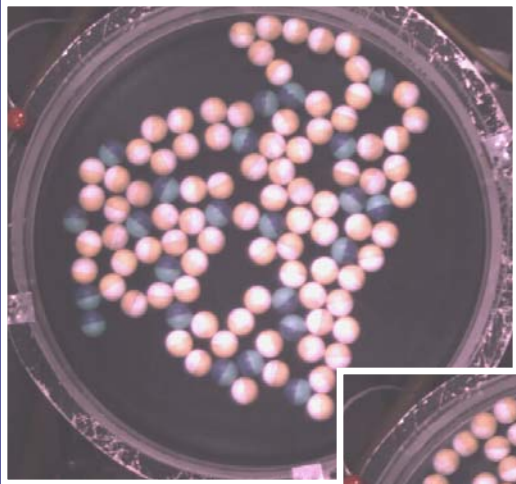


Image Processing and Data Acquisition

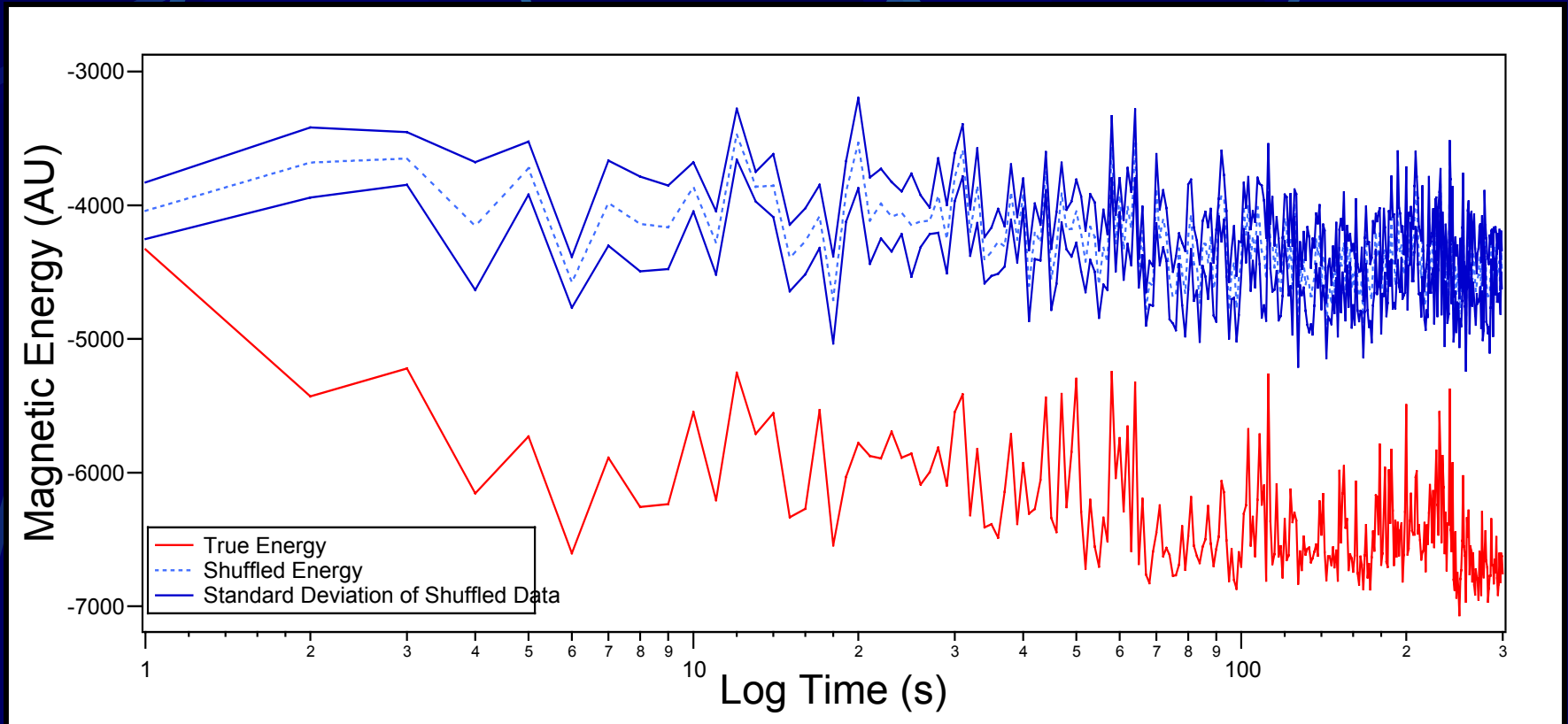
Finding marble locations and orientations



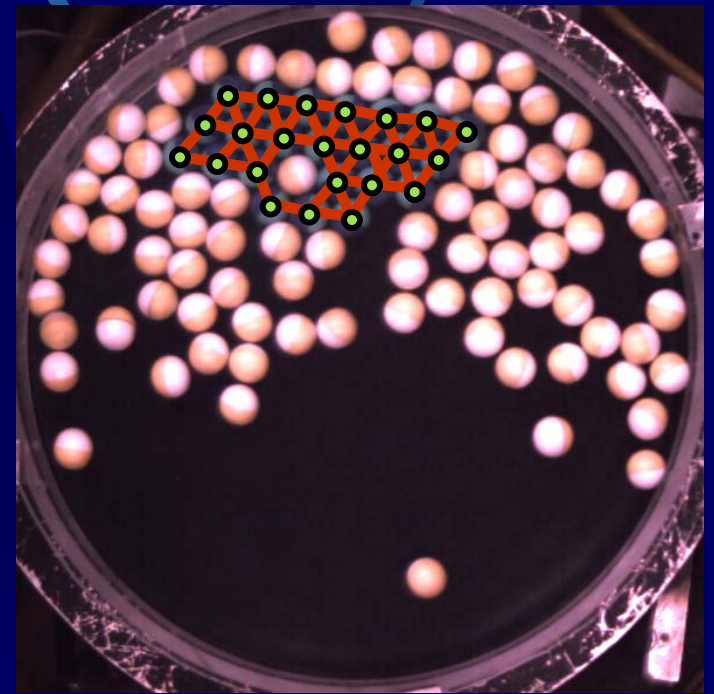
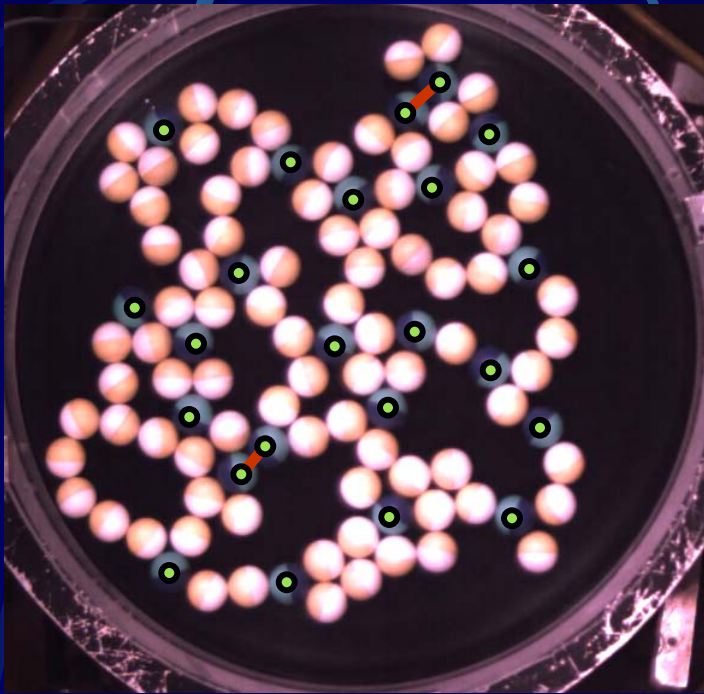
Clusters and Chains



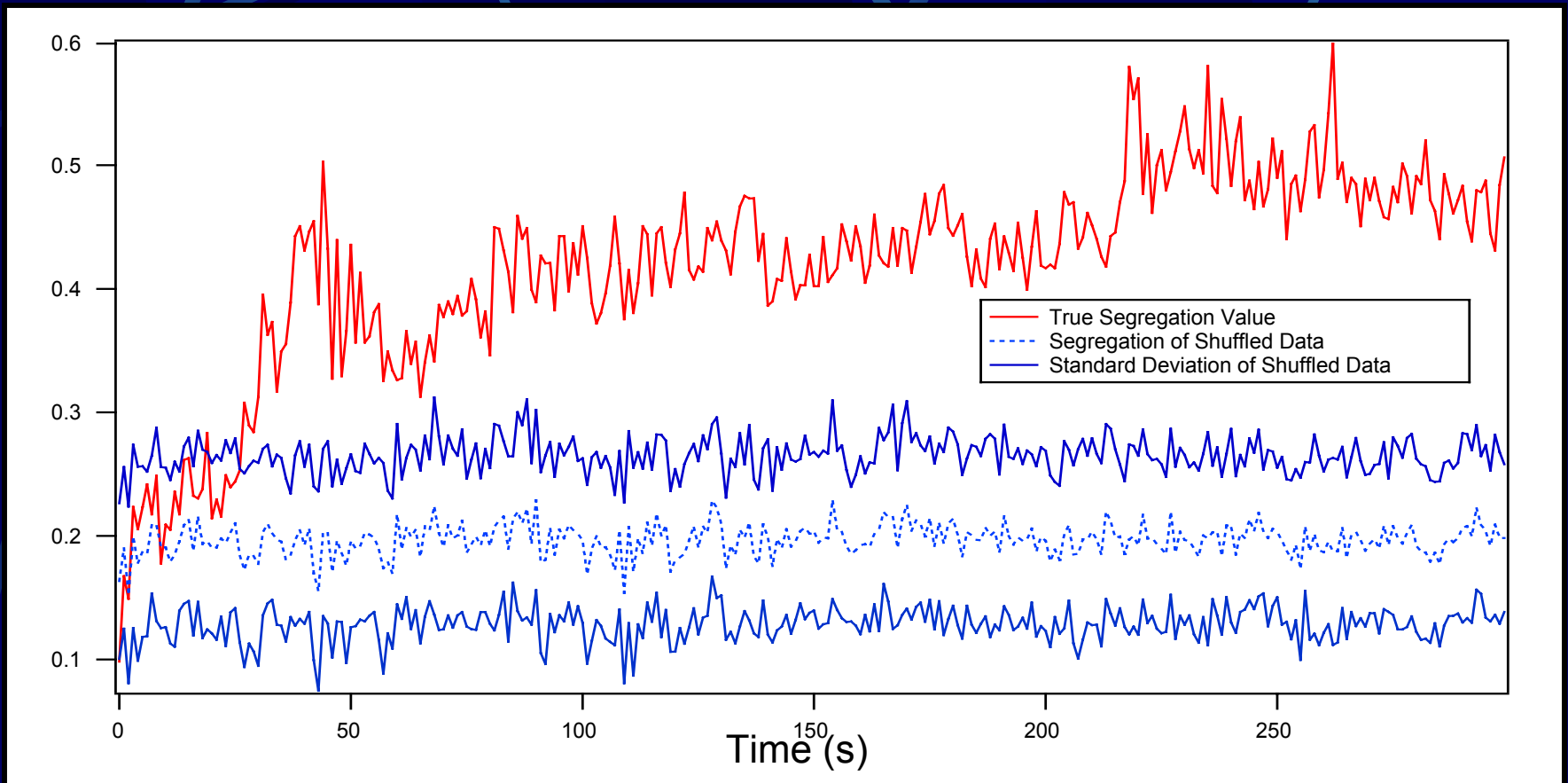
Energy and Time



Segregation



Segregation



Segregation by Groups

