

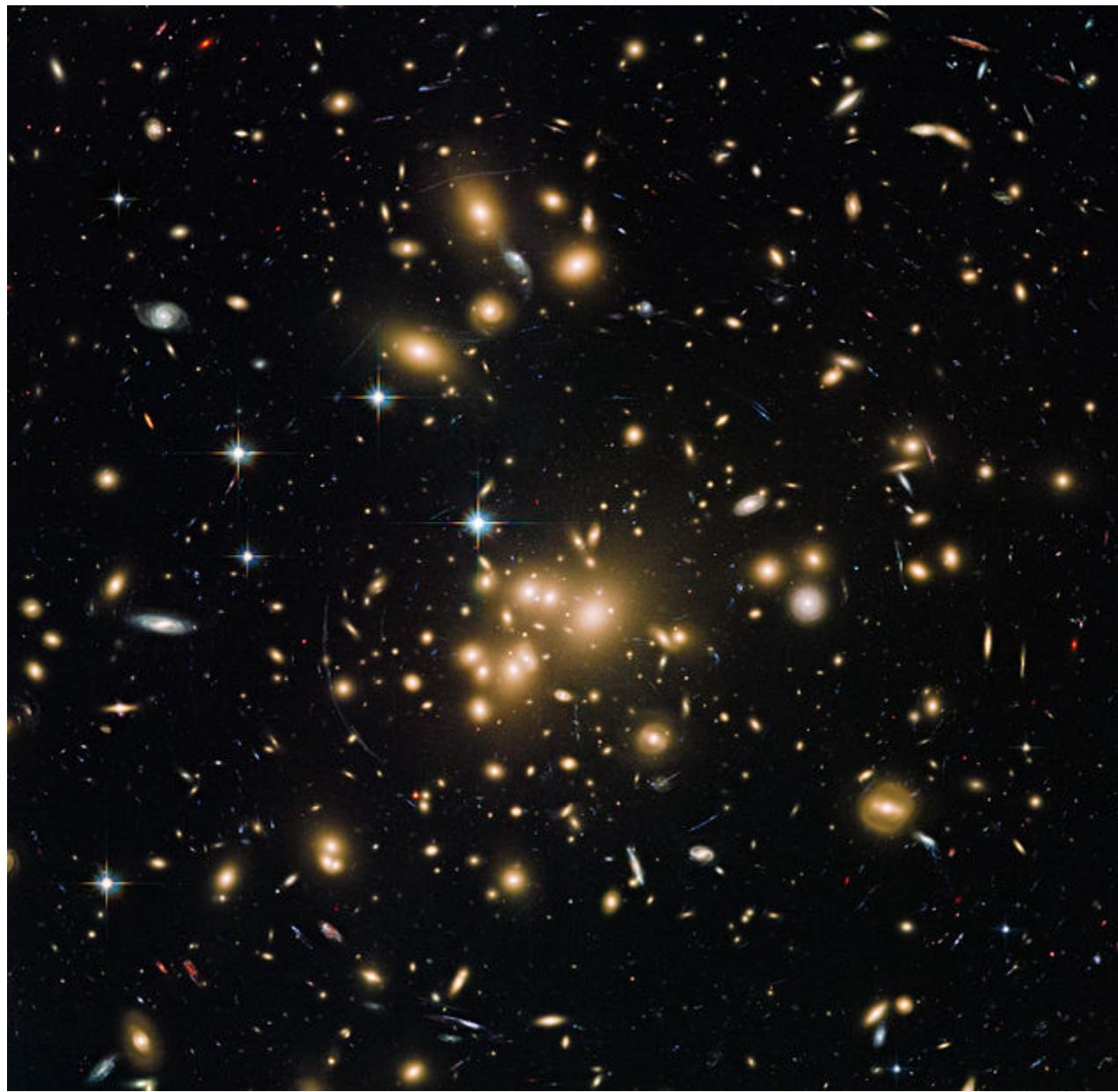
Galaxies and Their Environment
Tom Quinn & Lauren Anderson



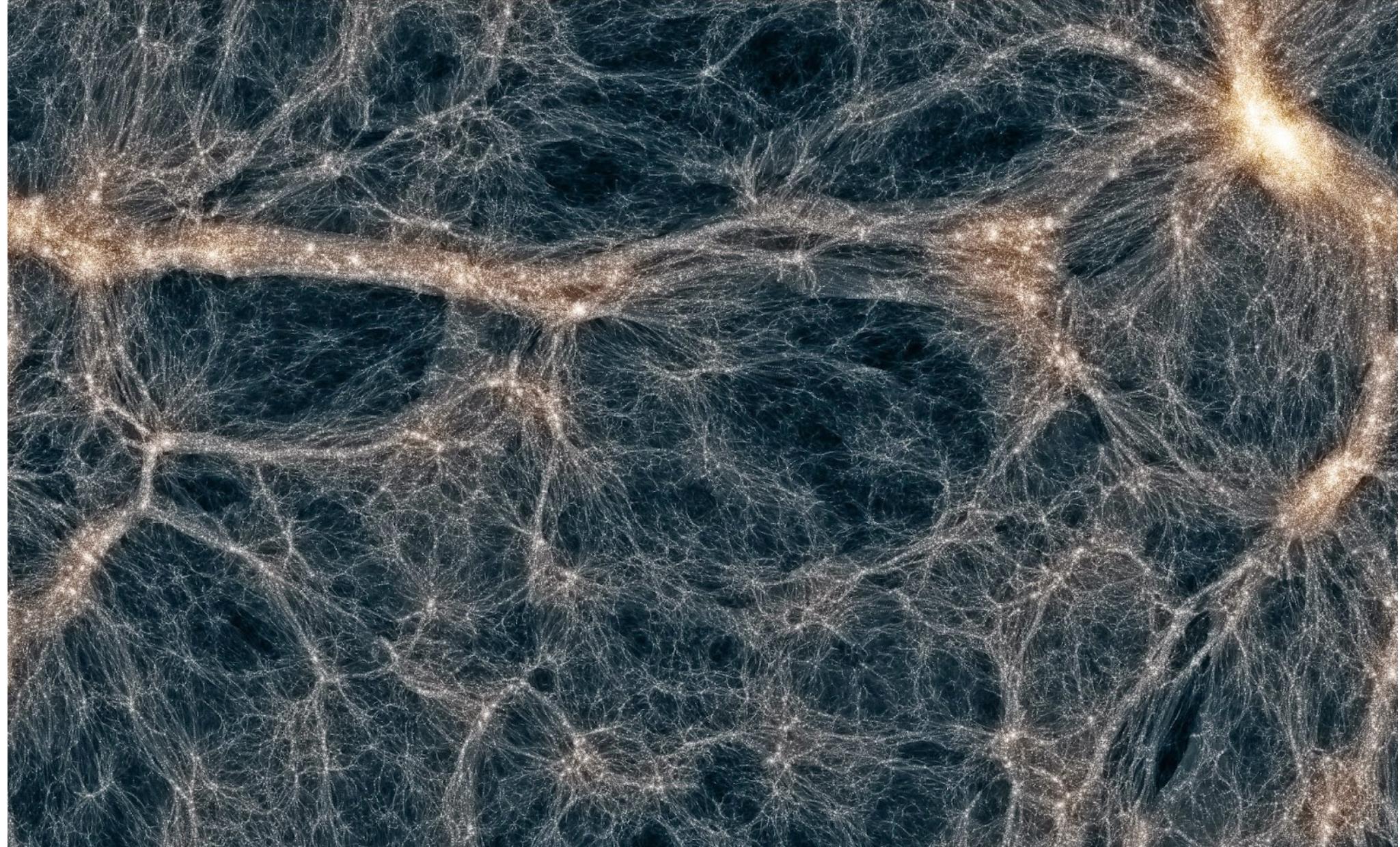
Spiral vs. Elliptical



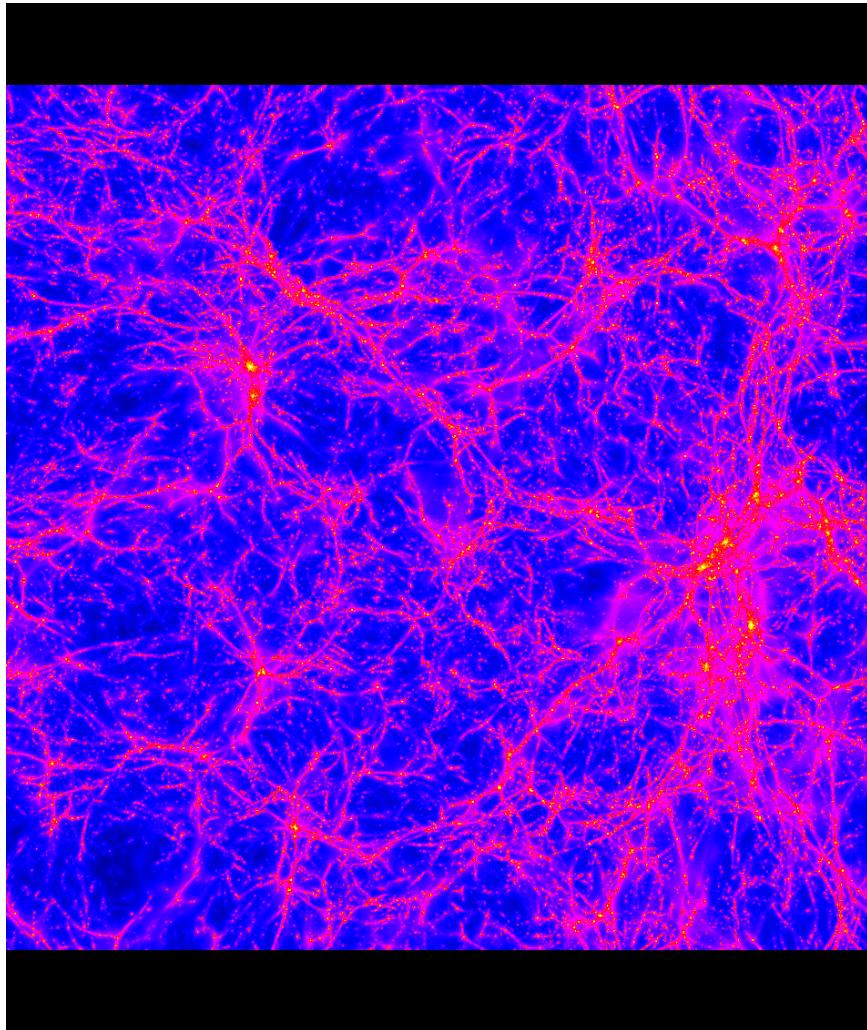
Density and Morphology



Galaxy Environments



Galaxy Formation Simulations



- Follow the physics of:
 - Gravity
 - Gas dynamics
 - Star formation
- Simulate observations
 - Morphology
 - Colors

Your task: extract/analyze

- „Find “Twins”: equal size galaxies in different environments
- „Extract them for ease of analysis
- „Compare their differences:
 - „Star formation history
 - „Merger history
 - „Recent interactions
 - „Current star content
 - „Current gas content