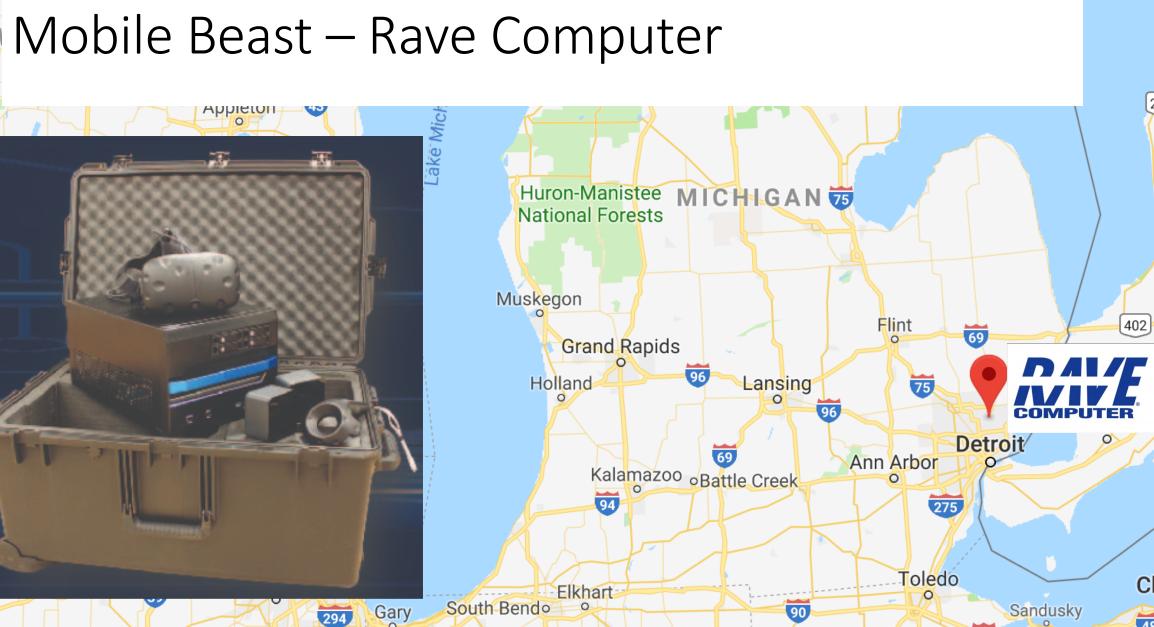
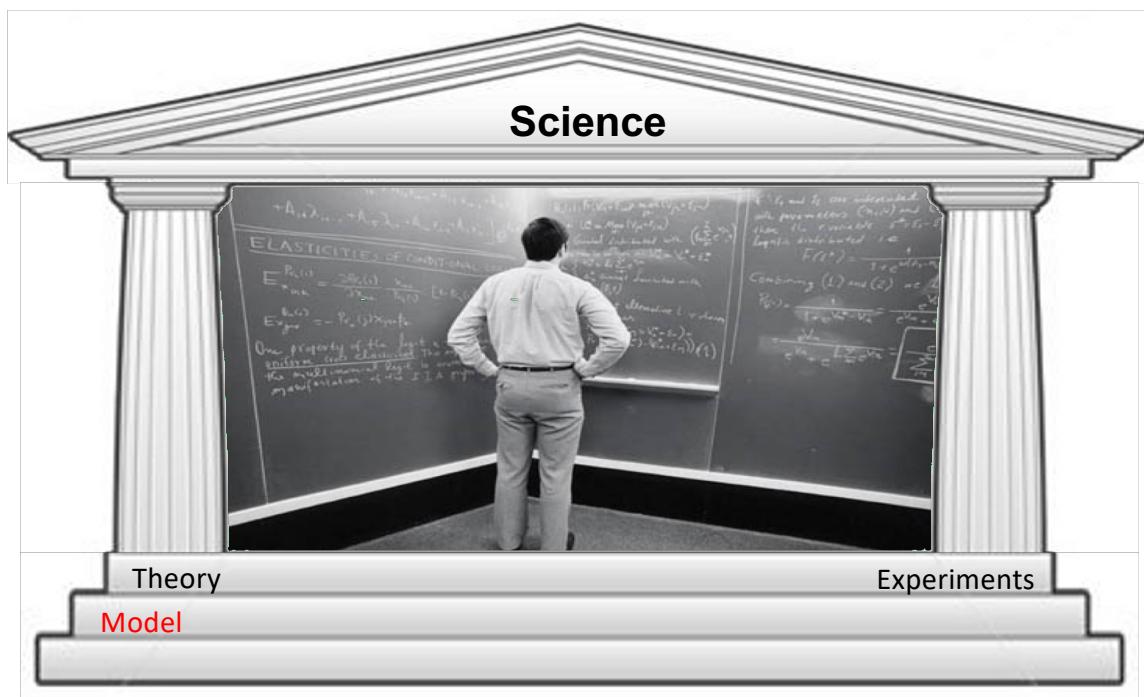
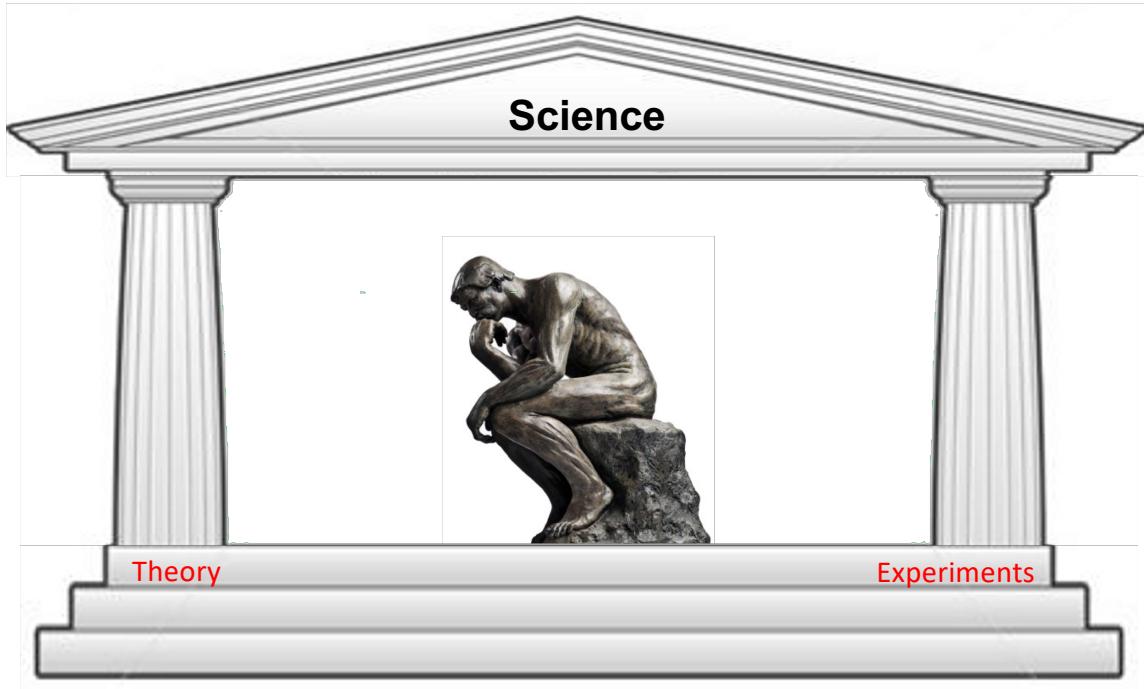
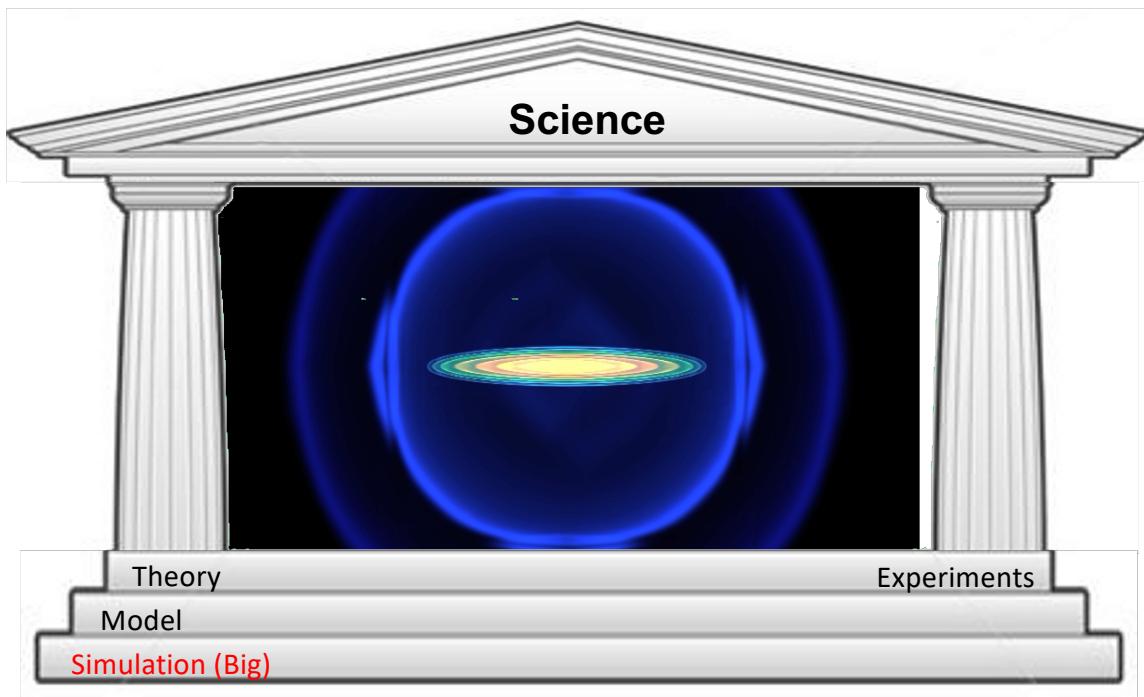
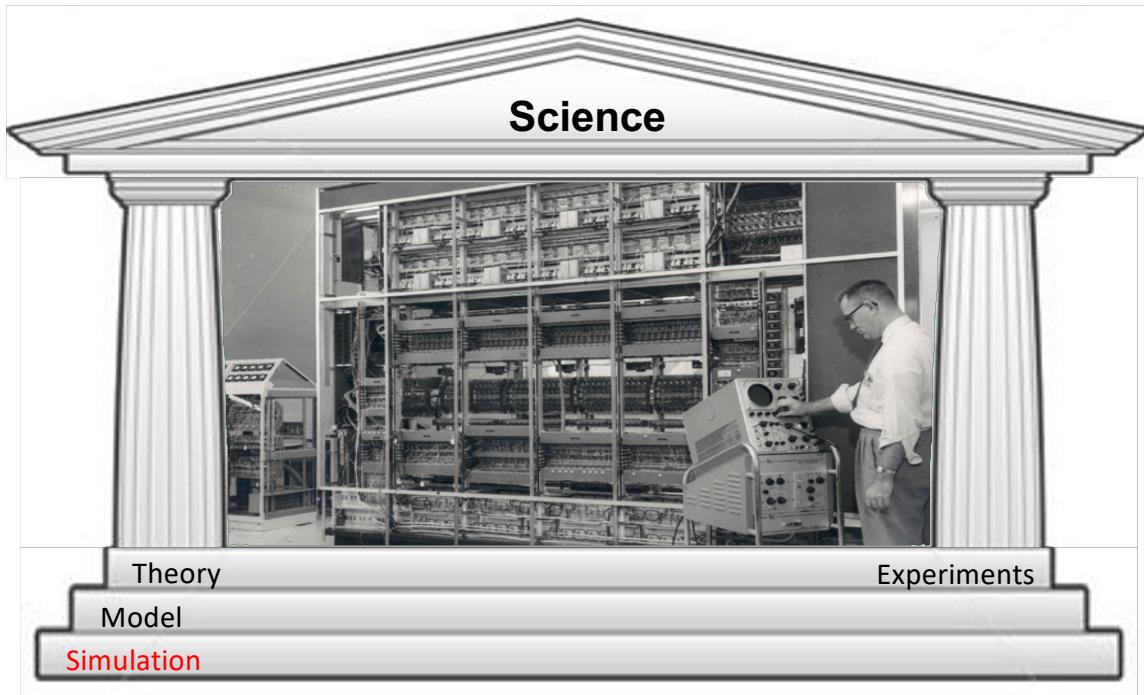


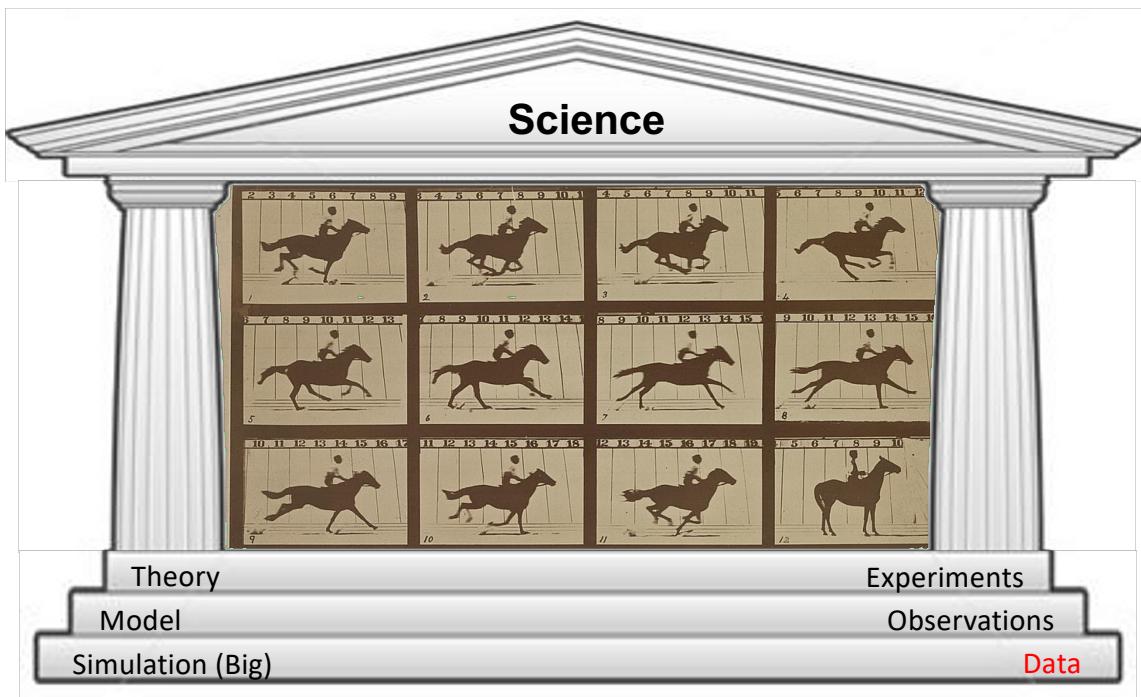
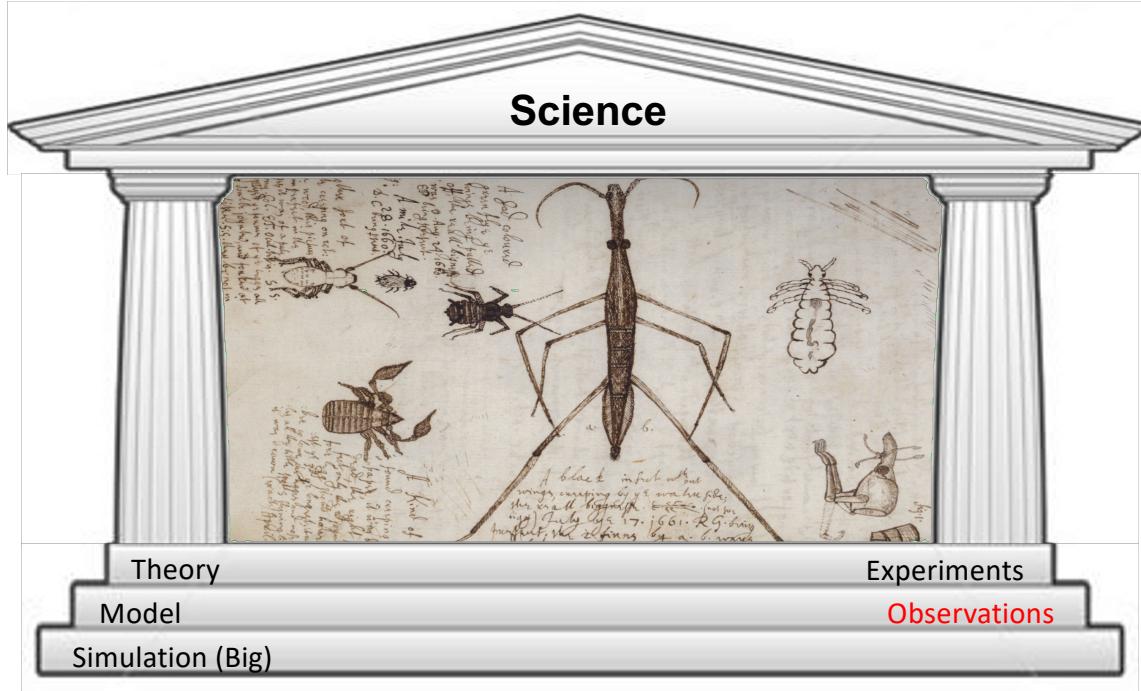
VR and Computational Mathematics Science and Engineering (CMSE)

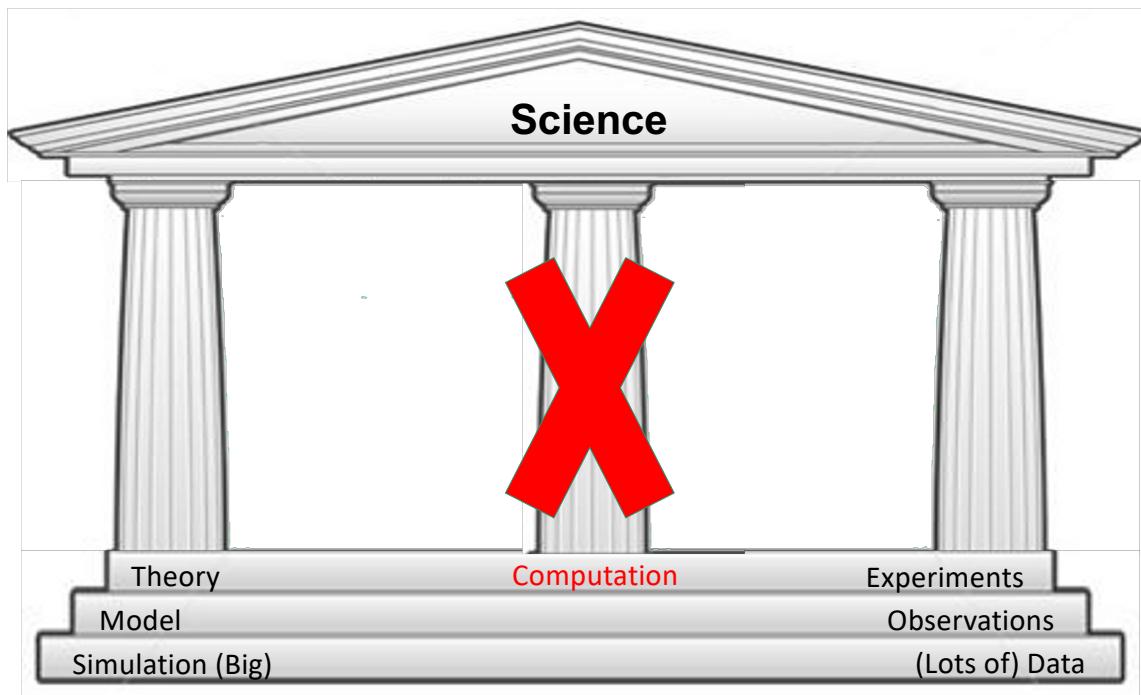
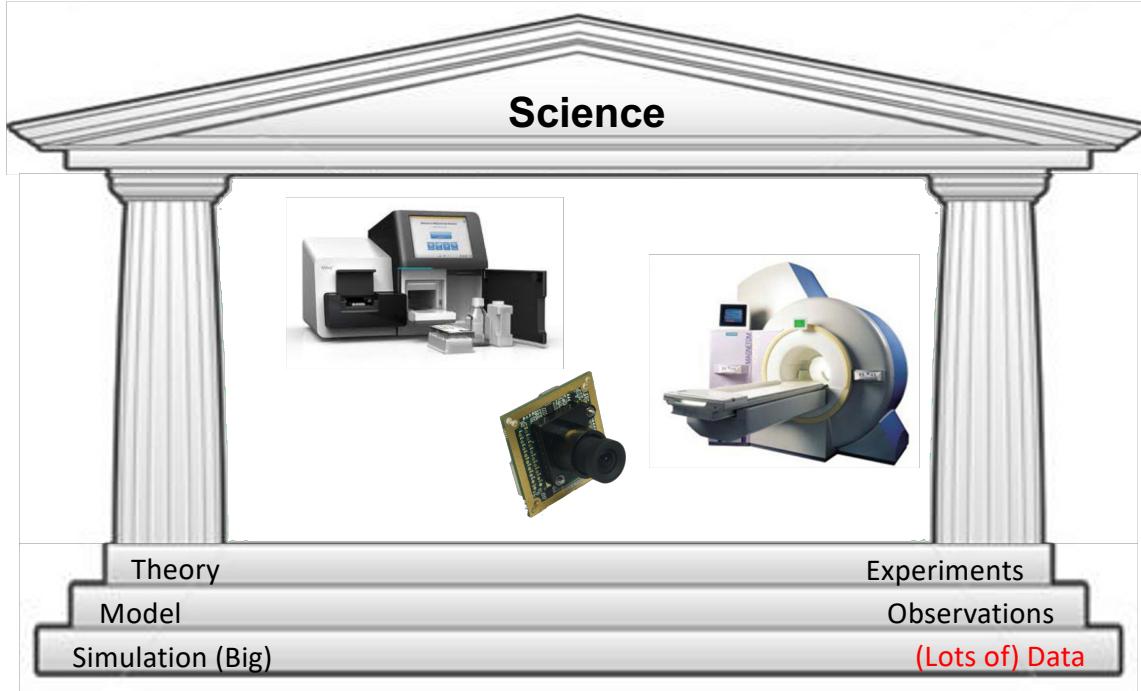
Dirk Colbry and David Butts

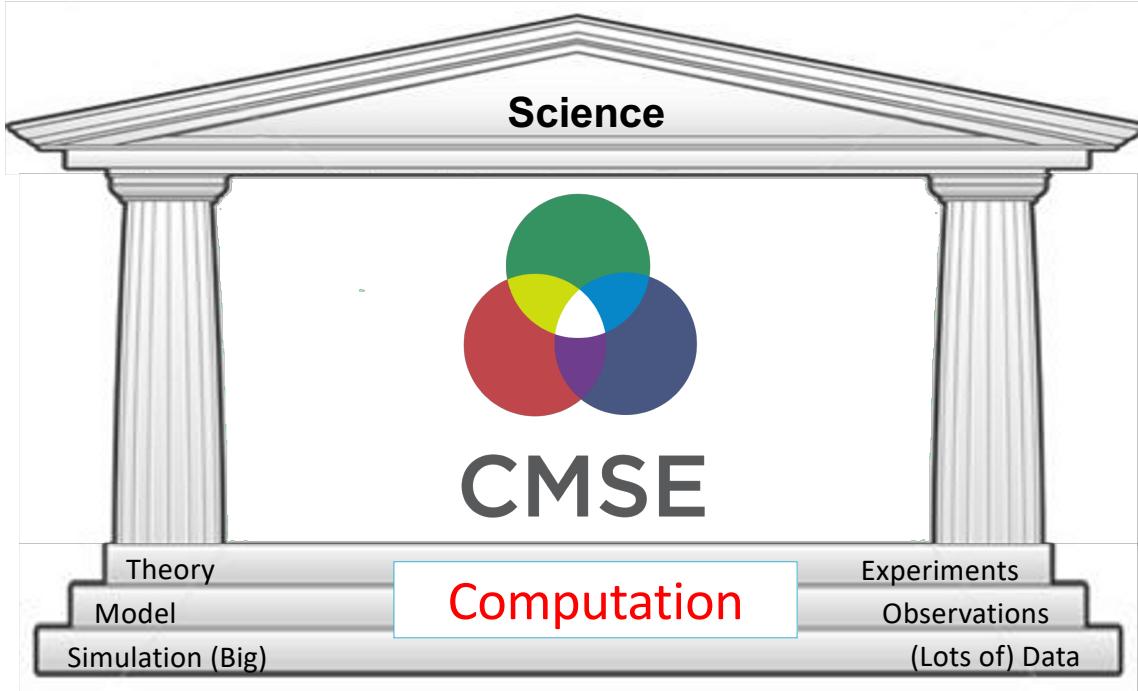






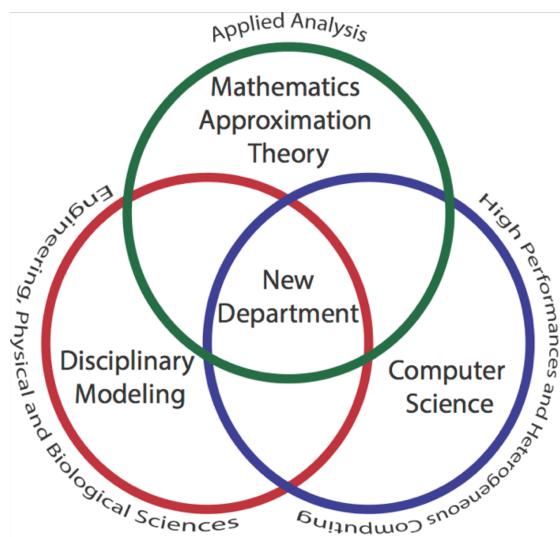






Computational Math, Science and Engineering

Computational science:
using computers to
analyze and solve
scientific and
engineering problems.



Virtual Reality

Scientific Visualization plays a role in the department's mission:

- Outreach
- Education
- Research

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Outreach





Outreach



Outreach

Education



How do we use VR/AR in the classroom?



Highly motivating for students



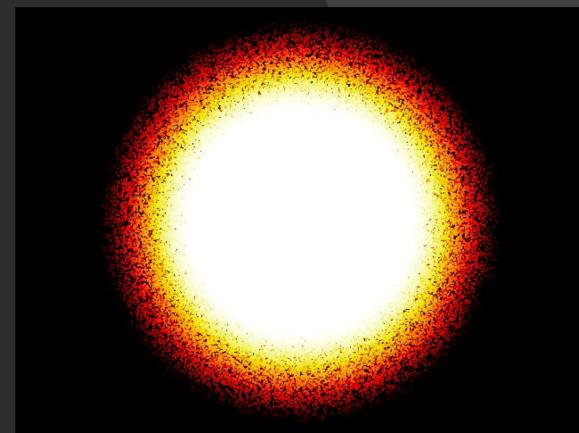
CMSE 402 - Principles of Data Visualization



Available Technology for student projects

Research

- How do we use VR/AR for scientific discovery?



Costs



Generating data is fairly cheap



Equipment is paid for



Time is expensive



Future Work

- Reduce barriers between data and VR
 - Matplotlib VR Plugin for Python
 - Maybe VR plugin for Excel