Astrophysics, particle physics and X-ray laser photon science have all acquired or are planning new machines and telescopes that deliver unprecedented amounts of data to experiments that will produce exciting new discoveries. This Conference is devoted to the statistical issues that arise in such experiments. There will be invited talks by scientists and statisticians in the three fields, as well as contributed papers. Important issues connected with both detecting signals of known character and searching for new discoveries include:

- Algorithms to implement automated and objective searches
- Discovery criteria and significance
- Accounting for false positives and negatives
- Computational efficiency

This Conference will bring together Astrophysicists, Particle Physicists, Photon Scientists and Statisticians to present the current state of the art and examine options for the future.

Local Organizing Committee:
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