

Astrophysics Seminar Series

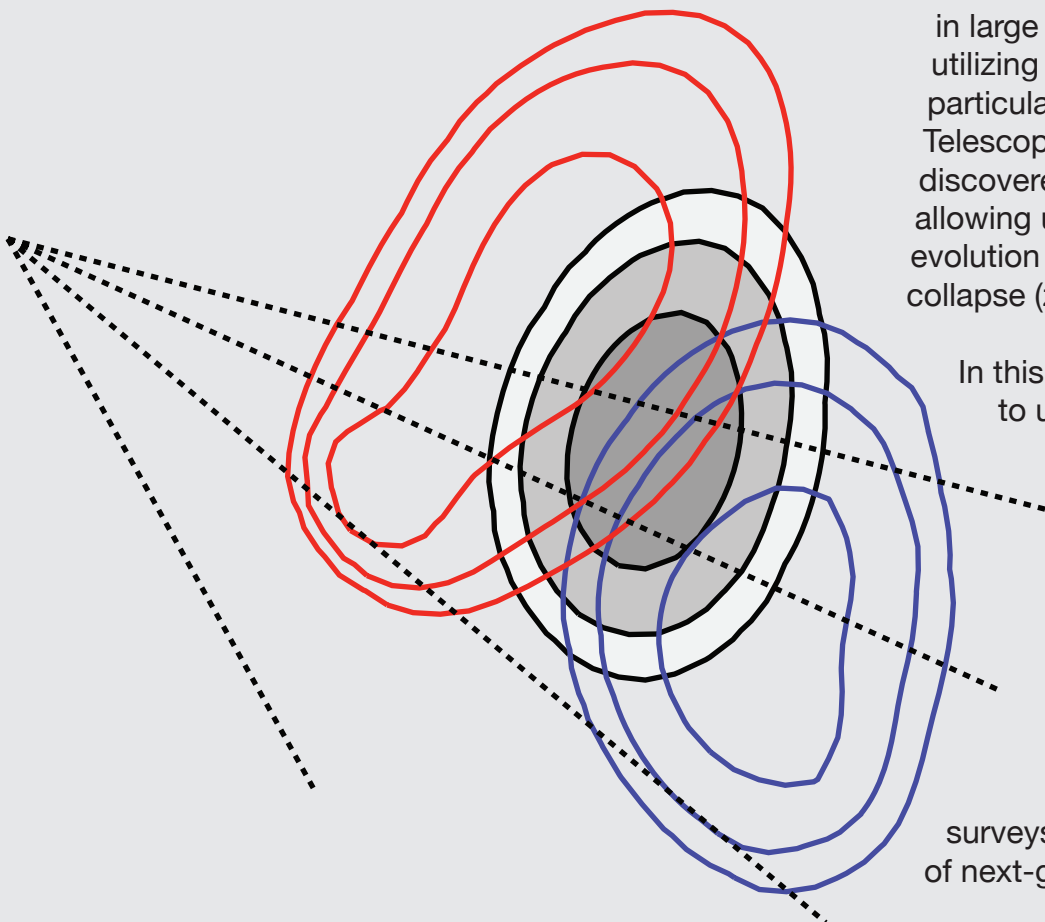
Michael McDonald

MIT Kavli Institute for Astrophysics and Space Research

Galaxy Cluster Evolution over the Past 10 Billion Years

In recent years, the number of known galaxy clusters has grown dramatically, thanks in large part to the success of surveys utilizing the Sunyaev Zel'dovich effect. In particular, surveys like the South Pole Telescope 2500 deg² survey have discovered hundreds of distant clusters, allowing us to trace for the first time the evolution of clusters from shortly after their collapse ($z \sim 2$) to present day ($z \sim 0$).

In this talk, I will highlight recent efforts to understand the observed evolution in the most massive clusters, in terms of the large-scale hot intracluster gas, the cooling gas in the very center of the cluster, the most massive central galaxy, and the supermassive black hole at the very center. In addition, I will attempt summarize the current state of galaxy cluster surveys and briefly discuss the potential of next-generation surveys.



1 November 3:30 pm
Boardroom (105), Rutherford Building

For more information: msi.mcgill.ca/Seminars.html