Michael T Lacey*, Math, Georgia Tech, Atlanta, GA 30332. Spherical Averages in the Continuous and Discrete Settings.

I will summarize old and new results for spherical averages, both in the continuous and discrete settings. These include $L^p$-improving estimates to sparse bounds. There are strong parallels between the two settings, with the discrete setting having many more essential elements to the proofs. This is joint work with Amalia Culiuc, Christina Giannitisi, Robert Kesler, and Dario Mena. (Received September 22, 2018)