

Boston University College of Arts & Sciences Institute for Astrophysical Research

2019—2020 ASTROPHYSICS SEMINAR SERIES

Open Star Clusters as Laboratories for Stellar Rotational Evolution

Open clusters are critical benchmarks for calibrating stellar properties such as rotation and magnetic activity. I will discuss recent rotation measurements in open clusters, including the first periods measured for fully convective Hyads. Discrepancies between open cluster data and models of angular momentum evolution imply that we still do not fully understand how magnetic fields affect stellar spin-down. I will also discuss

preliminary results showing how binary companions affect the evolution of stellar rotation, either by tidal forces or by disrupting disks around young stars.

