Dr. Gregg Wade

Professor (cross-appointed), RMC and Queen's University Wednesday, October 29, 2025 11:00 a.m. to 11:50 a.m. in ENW 115

Magnetism of stars

Abstract:

This presentation will describe the magnetism of the Sun and stars, how we think they are produced, and the methods we use to measure and interpret them. It is not about Taylor Swift or Ryan Reynolds or any of those famous people.

Bio:

Dr. Wade investigates the structure, evolution, origin and impact of magnetic fields in stars. His research concentrates on intermediate and high mass stars, which are the evolutionary progenitors of most white dwarfs, neutron stars and stellar-mass black holes. He is the Principal Investigator (PI) of the Magnetism in Massive Stars (MiMeS) collaboration, co-PI of the Binarity and Magnetic Interactions in Stars (BinaMIcS) project, and past-Chair of the international BRITE Executive Science Team (BEST) for the BRITE-Constellation mission.

In the context of RMC's Space Surveillance Research Laboratory (SSRL), Dr. Wade has also directed research related to the characterization of the structure, surface composition, and rotation of artificial satellites.

Dr. Wade was awarded RMC's Cowan Prize for Excellence in Research in 2019. His current research is focused on exploring exotic pathways to magnetic field generation in massive stars, understanding magnetic field properties and implications at later evolutionary phases of intermediate-mass and massive stars, and understanding non-thermal X-ray and radio emission from magnetic hot stars.