

School of Physical Sciences Seminar

Thursday (21 Oct) at 1pm, on Zoom

Prof. Mark Wardle, Centre for Astronomy, Astrophysics and Astrophotonics, Macquarie University (all the seminars will not be astro-related in case you're getting worried ;)

Title: Cosmic Rays in the Centre of the Galaxy

Abstract: The flux of cosmic ray particles in the inner Galaxy is extreme. A variety of evidence yields estimated fluxes that are 2 to 3 orders of magnitude larger than the interstellar flux in the neighbourhood of the solar system. The origin of this population of relativistic particles has not been conclusively identified, but large scale structures extending above and below the plane of the disk point to an explosive event in the central few hundred light years of the Galaxy that occurred 2-3 million years ago. Candidates for this include a burst of supernovae following an episode of vigorous star formation, or an outburst from the central supermassive black hole.