



## PROFESSOR ALAN DUFFY

Professor Alan Duffy is the Pro-Vice Chancellor of Flagship Initiatives at Swinburne University of Technology, bringing together diverse research teams with industry and government stakeholders to undertake transformative programmes in Flagship sectors of hydrogen, renewable technologies, AI, space and aerospace, MedTech and health innovation. He was the inaugural Director of the Space Technology and Industry Institute at Swinburne, finding ways to use space and AI to help companies and communities on Earth. His research background in computational astrophysics saw Alan model universes on supercomputers to understand how galaxies like our Milky Way form within vast clouds of dark matter. He is trying to find this dark matter as a Chief Investigator in the \$35M ARC CoE for Dark Matter Particle Physics and SABRE, the world's first dark matter detector in the Southern Hemisphere, at the Stawell Underground Physics Laboratory at the bottom of an active gold mine in Victoria. Alan is also the cofounder and CEO of mDetect, a spin-off company from his dark matter research, that uses particles from space to scan through rock for mineral exploration, identification of structural weaknesses in tailings dams, and subsidence/air gaps below critical infrastructure.

When not exploring simulated universes, he attempts to explain the science of this one to the public on TV as a regular on Ten's The Project and The Today Show, as well as radio and print.