Announcement of a lecture:

"To Mars and Beyond: Plasma Thrusting into the Future"

by Professor Rod Boswell

Abstract:

The main force driving humanity is imagination and the final frontier to explore is deep space. It is now not a question of "it we go to Mars and beyond, it is a matter of when and how. And, of course, how to get back! The main problem to solve is propulsion which breaks down into two topics: the first is how to get supply; the second is the propulsion itself. The most likely scenario would be to launch the component parts of the Mars ship into an earth holding orbit using chemical rockets, much like the fabrication of the International Space Station. For the long run to Mars, electrical propulsion using plasma thrusters will be required and these will be powered by nuclear-fission units. The basic concepts behind these will be outlined in this talk and the possibility of Australian collaboration with the USA and Europe will be discussed.

The main force driving humanity is imagination and the final frontier to explore is deep space. It is now not a question of "it we go to Mars and beyond, it is a matter of when and how. And, of course, how to get back! The main problem to solve is propulsion which breaks down into two topics: the first is how to get supply; the second is the propulsion itself. The most likely scenario would be to launch the component parts of the Mars ship into an earth holding orbit using chemical rockets, much like the fabrication of the International Space Station. For the long run to Mars, electrical propulsion using plasma thrusters will be required and these will be powered by nuclear-fission units. The basic concepts behind these will be outlined in this talk and the possibility of Australian collaboration with the USA and Europe will be discussed.