

## **Citation for the 2019 RAS 'G' Gold Medal: Professor Margaret Kivelson**

**Professor Margaret Kivelson receives the Gold Medal in Geophysics for a lifetime of outstanding achievement in understanding planetary magnetospheres and their connections to the planets they surround.**

In the 1970s, she was involved in the first spacecraft measurements of solar terrestrial coupling, codifying the Pioneer-derived magnetic field of Jupiter, and laying the foundations for understanding how magnetospheric convection feeds Earth's radiation belts.

She led the development of the magnetometer for the Galileo mission to Jupiter in the following decade, a spacecraft that enhanced our understanding of terrestrial ultra-low frequency (ULF) pulsations, and probed the interactions of small bodies with moving magnetospheres and the solar wind.

In the 1990s, she led the Galileo team to a series of outstanding discoveries including the magnetic fields of the Galilean satellites in orbit around Jupiter. And in this century, she has provided key insights into understanding the saturnian system as part of the Cassini magnetometer team.

Throughout her career, Professor Kivelson has been a true servant of the space science community. Her co-edited book "An Introduction to Space Physics", in which she authored key chapters, has played a pivotal role in the education of many of the community, and continues to do so.

Overcoming prejudices against female scientists who combined career and family responsibilities, Margaret Kivelson is an inspiration to young women in space science. Still highly active and productive at the age of 90, Professor Kivelson is an inspiration, too, to young women and older researchers alike.

For these reasons, Professor Kivelson is awarded the Royal Astronomical Society's Gold Medal.