



The International Kristian Birkeland Medal for space weather and space climate

relates to outstanding scientific or technological results. The International Medal Committee decided to award

Dr Dieter Bilitza

Dr. Bilitza is a research professor at George Mason University's School of Physics, Astronomy, and Computational Science in Fairfax, Virginia, and a chief scientist at NASA GSFC's Heliospheric Physics Laboratory.

He graduated in Germany on the heat balance of ionospheric plasma. There and later at NASA, he used satellite and ground-based data to study the ionospheric component of space weather and climate. He developed the first set of the International Reference Ionosphere, worldwide known as IRI. He has been the de facto leader of this truly international program for the last twenty years. The model development makes use of all available and reliable data sources for the ionospheric plasma. To appreciate the relevance of the IRI model development for space weather one needs to look at the percentage of papers acknowledging IRI in 2012: 8% of Journal of Geophysical Research – Space articles, 9.5% for the AGU Space Weather articles, and an amazing 15.1% of Radio Science articles. A wider literature search for 2011-12 reveals 271 citations of the IRI-2007 paper by Bilitza et al. across a wide spectrum of journals.

As Chief Scientist at NASA/GSFC's National Space Science Data Center (NSSDC) and Space Physics Data Facility (SPDF) his responsibilities include saving older data sets and making them useraccessible. As a member of the Virtual ITM Observatory team he developed the ModelWeb interface to empirical models that is now part of the Community Coordinated Modeling Center.

For all these reasons, the committee decided to award Doctor Dieter Bilitza with the 2013 Kristian Birkeland medal for Space Weather and Space Climate.