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TITNES

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Keeping an eye on the sun

He's been described as "eminent, exciting and flamboyant".

Professor Craig Rodger, space physicist from the University of Otago in New Zealand, was the guest speaker at Sansa's first public lecture for 2012 on Monday 30 January. Dr Lee-Anne McKinnell, MD of Sansa Space Science, said she had asked Rodger to present the lecture because, besides being a highly regarded space physicist, he is also a very entertaining speaker. Rodger's topic for the evening was: And then the Sun went Bang.

Although much of his work revolves around the impact the sun's activity has on the Earth, with regard to recent solar activity, Rodger said: "In the last week

things have really been getting exciting." The flare, which caused a global media frenzy, was described by Rodger as "a little pop, another little pop and a big bang".

The warning issued by Sansa's Regional Space Weather Warning Centre in Hermanus on 24 January described the solar activity: "A large sunspot, which is located in a geo-effective position, erupted in the early morning on Monday 23 January, at around 05:59 South African time. "The eruption produced a long-duration M9-class solar flare. The explosion's M9 ranking puts it on the threshold of being an X-class flare, the most powerful kind of solar flare. The flare triggered a proton event, which is likely to have an

impact on spacecraft in geosynchronous, polar and other orbits passing through Earth's ring current.

"In addition, strong geomagnetic storms are possible, which can cause unwanted effects on satellites and their performances. They can alter the features of the ionosphere, a layer crucial for signals transmitted to satellites or from an earth transmitter to an earth receiver, and can cause geomagnetically induced currents on power lines and stress on power distribution transformers."

Rodger said that - while geomagnetic storms can "zap a satellite's memory" (especially those used by airlines), and some flights close to the north pole, for example, had to be rerouted - the event was interesting and important, but not dangerous or scary. KERRY VAN RENSBURG



Sansa Space Science managing director Dr Lee-Anne McKinnell with Professor Craig Rodger, visiting guest speaker, shortly before his presentation on Monday evening. KERRY VAN RENSBURG