

# ESC2RAD

Enabling Smart Computations to study  
space RADiation effects



Friday 1<sup>st</sup> of June 2018 – Nicolet 1 & 2

## Oral presentations

09:00 - 09:10	F. Da Pieve (BIRA-IASB, BE): <b>Welcome and Intro on ESC2RAD</b>
09:10 - 09:45	A.C. Vandaele (BIRA-IASB, BE): <b>Planetary exploration</b>
09:45 - 10:15	E. Botek (BIRA-IASB, BE): <b>Towards a better understanding of Space Weather sources and effects</b>
10:15 - 10:50	E. Artacho (CIC nanoGUNE research center, ES, and Univ. of Cambridge, UK): <b>Electronic stopping power in hard matter from first principles</b>
10:50 - 11:10	<i>Coffee break</i>
11:20 - 11:55	J. Kohanoff (Queen's Univ. of Belfast, UK): <b>DNA damage in the physiological environment from ab initio molecular dynamics simulations</b>
11:55 - 12:30	F. Cleri (Univ. of Lille, FR): <b>Biophysical insights about the role of DNA strand breaks in cancer development and therapy</b>
12:30 - 13:45	<i>Lunch</i>
13:45 - 14:20	J. Brown (TUDelft, NL and Univ. of Wollongong, AU): <b>Monte Carlo simulation of early biological damage induced by ionising radiation at the DNA scale: overview of the Geant4-DNA project</b>
14:20 - 14:55	O. Van Hoey (SCK-CEN, BE): <b>Radiation dosimetry in space with luminescent detectors and radiation transport simulations</b>
14:55 - 15:15	F. Da Pieve (BIRA-IASB, BE): <b>Characterization of the radiation environment at potential landing sites on Mars</b>
15:15 - 15:40	<i>Coffee break</i>
15:40 - 17:30	Discussion reserved to the members of the consortium
19:30	<i>Dinner - reserved to the members of the consortium</i>

*You want to participate to one/two sessions or to the full day program ? Please send me an email, specifying also if you want to stay for the lunch, by Thursday 24th of May : [fabiana.dapieve@aeronomie.be](mailto:fabiana.dapieve@aeronomie.be)*