Workshop on Radiation in the Next Generation of Weather Forecast Models

21 - 24 May 2018

Programme

13:30-14:00 Registration and coffee Meather Room 14:00-14:05 Welcome Andy Brown (ECMWF) 14:05-14:40 Challenges for radiation in NWP models Robin Hogan (ECMWF) Session 1 Optical and macrophysical properties of clouds and aerosols 14:40-15:15 Aerosols-cloud-radiation interactions Jim Haywood (Met Office, University of Exeter) 15:15-15:45 Coffee break Concourse 15:45-16:20 Cloud macrophysical properties Maike Ahlgrimm (ECMWF) 16:20-16:55 The quest for consistent ice optical properties across the spectrum University of Hertfordshire) 17:00-19:00 Drinks reception and poster presentations Weather Room Tuesday 22 May Session 2 Representing gas absorption Chair: Marco Matricardi 10:30-11:25 Some issues in near-infrared radiative transfer Keith Shine (University of Reading) 10:30-11:10 Coffee break Concourse 11:10-11:45 Uncorrelated k-distribution models Jürgen Fischer (FUB) Session 3 Solvers and efficiency Chair: James Manners (Met Office) 11:45-12:20 Several issues for current radiation algorithms in climate models 13:00-14:00 Lunch break 14:00-14:35 Balancing efficiency, accuracy, and flexibility in a radiation code for dynamical models Colorado)	Monday 21 M	lay	
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14:35-15:10	Gauss-Legendre quadrature for computation of atmospheric radiative flux profiles	Howard Barker (ECCC)
15:15-15:45	Coffee break	Concourse
Session 4	Complex surfaces	Chair: Gianpaolo Balsamo (ECMWF)
15:45-16:20	Radiation and orography in weather models	Laura Rontu (FMI)
16:20-16:55	Why do we need improved vegetation-radiation interactions in earth system models?	Tristan Quaife (University of Reading)
16:55-17:30	Surface-radiation interactions in polar regions: challenges and future perspectives	Roberta Pirazzini (FMI)
Wednesday	23 May	
Session 5	Beyond the stratosphere	Chair: Robin Hogan
09:15-09:50	Radiative transfer for extra-solar planets: bringing it down to Earth	James Manners (Met Office)
09:50-10:25	Modelling non-LTE effects	Manuel López-Puertas (IAA)
10:30-11:10	Coffee break	Concourse
Session 6	Evaluation and data assimilation	Chair: Alessio Bozzo
11:10-11:45	Evaluation of IFS surface radiation from the ground and satellite	Thomas Haiden (ECMWF)
11:45-12:20	Evaluation of radiation schemes using aircraft observations	Manfred Wendisch (University Leipzig)
12:20-12:55	Infrared radiance modelling and assimilation	Marco Matricardi (ECMWF)
13:00-14:00	Lunch break	
14:00-14:35	Solar radiance modelling and assimilation	Leonhard Scheck (LMU)
Session 7	Working groups	
14:35-14:45	Description of working groups	Robin Hogan
14:45-17:30	Working groups	Mezzanine, LCR, MR1
15:30-16:00	Coffee available	Concourse
17:30-18:30	Pre-dinner drinks	Weather Room and Foyer
18:30	Workshop dinner	ECMWF Restaurant
Thursday 24	May	
09:15-10:30	Working groups	Mezzanine, LCR, MR1
10:30-11:00	Coffee break	Concourse
11:00-12:00	Working groups	Mezzanine, LCR, MR1
12.00-13.00	Plenary session	Lecture Theatre
13:00	End of workshop	
13:00-14:00	Lunch break	
14:00-16:00	HARMONIE radiation team (invitation only)	MR3 (booked for whole afternoon)