Feedback on climate in the Earth system

Monday 8 – Tuesday 9 December 2014

Organised by Professor Eric Wolff FRS, Professor John Shepherd CBE FRS, Dr Emily Shuckburgh and Professor Andrew Watson FRS

DAY 1				DAY 2			
SESSION 1 Water vapour-cloud-climate feedbacks Chair: John Shepherd		**SESSION 2** Cryosphere - climate feedbacks Chair: Eric Wolff		**SESSION 3** Carbon cycle and greenhouse gas climate feedbacks Chair: Andrew Watson		**SESSION 4** Feedbacks, uncertainty and risk Chair: Emily Shuckburgh	
09.00	Welcome by the Royal Society & Eric Wolff FRS						
09.05	**Reto Knutti** Feedbacks and climate sensitivity	**13.30**	**Jonathan Gregory** The inconstancy of transient climate sensitivity	**09.00**	**Pierre Friedlingstein** Carbon cycle feedbacks and future climate change	**13.30**	**Nathan Gillett** Observational constraints on the net effect of climate feedbacks on future climate change
09.30	Discussion	**14.00**	Discussion	**09.30**	Discussion	**14.00**	Discussion
09.45	**Mark Webb** De-evolving climate models	**14.15**	**Cecillia Bitz** Polar amplification in the 21st Century	**09.45**	**Andy Ridgwell** Carbon is for ever (almost): Regulation of CO2 and climate on geological time-scales	**14.15**	**Rowan Sutton** What does global mean temperature tell us about local climate?
10.15	Discussion	**14.45**	Discussion	**10.15**	Discussion	**14.45**	Discussion
10.30	Coffee	**15.00**	Tea	**10.30**	Coffee	**15.00**	Tea
11.00	**Chris Bretherton** Mechanisms of low-latitude cloud feedback	**15.30**	**Dan Lunt** Ice sheet / climate interactions in the deep past	**11.00**	**Charles Koven** Permafrost thaw and its role as a carbon cycle feedback to global warming	**15.30**	**Chris Hope** Global impacts of arctic feedbacks, and the value of better information
11.30	Discussion	**16.00**	Discussion	**11.30**	Discussion	**16.00**	Discussion
11.45	**Urs Baltensperger** Aerosol-cloud and the CLOUD experiment	**16.15**	**David Vaughan** TBC	**11.45**	**Pascale Braconnot** PMIP3: paleo view on feedbacks	**16.15**	**Summary and closing remarks**
12.15	Discussion	**16.45**	Discussion	**12.15**	Discussion	**17.00**	CLOSE
12.30	LUNCH	**17.00**	CLOSE	**12.30**	LUNCH		

*Draft programme – correct as of **25/11/2014** – subject to change*