

# *Second IAA Symposium on “Searching for Life Signatures”*

*6-7 OCTOBER 2010, PROGRAM, subject to change*

*WEDNESDAY, 6<sup>TH</sup> OCTOBER 2010, 8:00 – 8:30 Registration of Participants*

	<u><b>IAA paper #</b></u>
<b><i>Opening Ceremony 9:00-9:15</i></b>	
<b>IAA Activity for SETI and Welcome to Participants</b> <i>Claudio Maccone (IAA, Italy)</i>	IAA-S10-0101
<b><i>Keynote Lecture 9:15-10:00</i></b>	
<b>Statistical Drake Equation and Statistical Fermi Paradox</b> <i>Claudio Maccone (IAA, Italy)</i>	IAA-S10-0102
<b><i>Session 1: Interstellar Messaging 10:00-11:00</i></b>	
<b>10:00 – 10:30 Classification of Interstellar Radio Messages</b> <i>Alexander Zaitsev (IRE, Russia)</i>	IAA-S10-0103
<b>10:30 – 11:00 Gravitational Lensing for Interstellar Communications</b> <i>Claudio Maccone (IAA, Italy)</i>	IAA-S10-0104
<b><i>11:00 – 11:30 Coffee Break</i></b>	
<b><i>Session 2: Analysing the ETI message 11:30-12:30</i></b>	
<b>11:30 – 12:00 The DISC (Decipherment Impact of a Signal’s Content) Quotient</b> <i>John Elliott (Leeds Metropolitan University, UK), Stephen Baxter</i>	IAA-S10-0105
<b>12:00 – 12:30 Constructing the Matrix</b> <i>John Elliott (Leeds Metropolitan University, UK)</i>	IAA-S10-0106
<b><i>12:30 – 13:30 Lunch Break</i></b>	
<b><i>Session 3: Our society and potential extra-terrestrial neighbours 13:30-14:30</i></b>	
<b>13:30 – 14:00 Opening the Pandora’s Box of Contact</b> <i>Kathryn Denning (York University, Canada)</i>	IAA-S10-0107
<b>14:00 – 14:30 A SETI Metapolicy: New Directions Towards Comprehensive Policies Concerning the Detection of Extraterrestrial Intelligence</b> <i>Stephen Baxter (UK), John Elliott</i>	IAA-S10-0108
<b><i>14:30 – 15:00 Coffee Break</i></b>	
<b><i>Session 4: “Communication with Extraterrestrial Intelligence”</i></b>	
	<b><i>IAA Study Group 15:00-18:30</i></b>
<i>Chair: Douglas Vakoch (SETI Institute, USA)</i>	
<b>15:00 – 15:10 The Influence of the Works Produced by the Various IAA Study Groups on Space Policy Makers</b> <i>Claudio Maccone (IAA, Italy)</i>	
<b>15:10 – 15:30 Sending Messages: A Comparison between the Early Proposals (XIXth Century) and the Realized Projects (XXth-XXIth Centuries)</b> <i>Florence Raulin Cerceau (Centre Alexandre Koyré, France)</i>	
<b>15:30 – 15:50 How Can the Active SETI Debate Be Constructive?</b> <i>Kathryn Denning (York University, Canada)</i>	
<b>15:50 – 16:10 If Active SETI Succeeds: Constructively Anticipating Outcomes</b> <i>Stephen Baxter (UK)</i>	
<b>16:10 – 16:30 Why Sending Messages to the Stars is Actually GOOD for You</b> <i>Seth Shostak (SETI Institute, USA)</i>	
<b><i>16:30 – 16:50 Break</i></b>	
<b>16:50 – 17:10 Long-Term Strategic Planning for Active SETI</b> <i>Mark Lupisella (NASA Goddard Space Flight Center, USA)</i>	
<b>17:10 – 17:30 Interstellar Communication Objectives and Limitations: A Roadmap to Signal and Receiver Design</b> <i>Ian Morison (University of New South Wales, Australia), David Messerschmitt (University of California, Berkeley, USA)</i>	
<b>17:30 – 17:50 How to Read a Letter from ET</b> <i>Stephane Dumas (SETI League, Canada)</i>	

**17:50 – 18:10 Legal Aspects of Searching for and Finding Extraterrestrial Intelligence**

*Frans von der Dunk (University of Nebraska, Lincoln, USA)*

**18:10 – 18:30 Transmitting May Be Good for Us**

*Alan Penny (University of St Andrews, UK)*

**Dinner 19:00-22:00**

**THURSDAY, 7<sup>TH</sup> OCTOBER 2010**

**Keynote Lecture 8:45-9:30**

**Does life on Earth imply life on Mars ?**

IAA-S10-0201

*Monica Grady (Open University, UK)*

**Session 5: Biosignatures 9:30-11:00**

**10:00 – 10:30 Colonial growth of coacervates as metaplastic proto-cocci on silicon surface:**

**A new way to search for origin of life**

IAA-S10-0202

*Satadal Das (Department of Microbiology, Peerless Hospital & B. K. Roy Research Centre, Kolkata, India)*

**10:30 – 11:00 Astrobiology of Clays: Habitability potential and microRaman detection of biosignatures (LPS, ATP, and DNA) in clay minerals analogs for Mars Science Laboratory and Exomars missions**

IAA-S10-0203

*Rosalba Bonaccorsi (NASA Ames Research Center, USA), Timothy B. Shirey (University of Alabama, USA), Lara Vimercati (University of Milan, Italy), Christopher P. McKay, Bin Chen (NASA Ames).*

**12:30 – 13:00 The Potential Biosignatures in Super-Earth Atmospheres:**

**Photochemical Responses**

IAA-S10-0204

*John L. Grenfell (Technical University Berlin, Germany), Heike Rauer, Stefanie Gebauer, Philip von Paris, Mareike Godolt*

**11:00 – 11:30 Coffee Break**

**Session 6: Our origins and future 11:30-13:00**

**11:30 – 12:00 Titan, Early History from Exobiological Point of View**

IAA-S10-0205

*Michael B. Simakov (Russian Academy of Sciences, St. Petersburg, Russia)*

**12:00 – 12:30 Planet populations in the Milky Way and beyond**

IAA-S10-0206

*Martin Dominik (University of St Andrews, UK)*

**12:30 – 13:00 Are SETI projects probing the “Right Wall” of complexity?**

IAA-S10-0207

*Milan M. Cirkovic (Astronomical Observatory of Belgrade, Serbia), Karl Schroeder*

**13:00 – 14:00 Lunch Break**

**Session 7: New frontiers in SETI radio searches 14:00-16:00**

**14:00 – 14:30 Using LOFAR and its all-sky viewing capabilities for SETI below and above the FM Radio Band**

IAA-S10-0208

*Heino Falcke (ASTRON, The Netherlands), Michael Garrett, Alan Penny*

**14:30 – 15:00 A pilot low-frequency SETI search of nearby stars**

IAA-S10-0209

*Alan Penny (University of St Andrews, UK), Heino Falcke, Michael Garrett, Michael Wise, Bob Nichol, Rob Fender*

**15:00 – 15:30 KLT and Relativistic KLT Filtering for LOFAR**

IAA-S10-0210

*Claudio Maccone (IAA, Italy)*

**15:30 – 16:00 Detection of antipodal signalling and its application to wideband SETI**

IAA-S10-0211

*Ian Morison (University of New South Wales, Australia)*

**16:00 – 16:30 Coffee Break**

**Session 8: SETI beyond radio signals 16:30-18:30**

**16:30 – 17:00 Starry Messages: Searching for Signatures of Interstellar Archaeology**

IAA-S10-0212

*Dick Carrigan (Fermilab, Batavia, Illinois, USA)*

**17:00 – 17:30 Barking up the wrong tree**

IAA-S10-0213

*Milan M. Cirkovic (Astronomical Observatory of Belgrade, Serbia)*

**17:30 – 18:00 SETI: Advanced Technology of Life Signatures**

IAA-S10-0214

*William Edmondson (University of Birmingham, UK)*

**Dinner 19:00-22:00**