

## ISHPSSB2013 – Interdisciplinary Session Form

**Title of the session:**

“The Nature of Cellular Complexity” (*Double Session*)

**Organizer of the session (may but need not be a participant in the session):**

Daniel Nicholson

**Names of all the participants in the session:**

First 90 Minutes: The Nature of Cellular Complexity 1

1. **Jean-Jacques Kupiec** – “The Cell: Between Constraints and Stochasticity”
2. **Oliver Gandrillon** – “Demonstrated, Predictable, Information-Rich: Why Biologists should not be Afraid of Stochasticity in Gene Expression”
3. **Andras Paldi** – “The Role of Cell Environment in Controlling Stochastic Gene Expression and Metabolism”

Second 90 Minutes: The Nature of Cellular Complexity 2

4. **Jordi García-Ojalvo** – “The Role of Quantitative Theories in the Understanding of Cellular Complexity”
5. **Daniel Nicholson** – “Mechanicism vs. Organicism: Two Views of the Cell”
6. **Karl Matlin** – “Putting the Biology in Cell and Molecular Biology”

**Name of two Chairpersons, coming from different disciplines (cannot be participants in the session):**

Giovanni Boniolo (Philosophy)

Ana Soto (Science)

**Names of respondents or commentators:**

Commentator for First 90 Minutes: Pierre-Allain Braillard

Commentator for Second 90 Minutes: Lenny Moss

**Themes of your session (please pick two themes in the list below):**

- Cellular and Molecular Biology: Historical and Philosophical Approaches
- Systems Biology, Synthetic Biology and Genomics