

# PROGRAM OF THE WORKSHOP

## Saturday 12 April 2008

Arrival and Registration at the Ettore Majorana Centre

## Sunday 13 April 2008

Free morning for excursions in Erice and Registration at the Centre

Lunch

15:30 – 15:45 Opening of the School (P. L. Luisi, H. Bersini)

*First Session (Chairman: P. L. Luisi)*

15:45 – 16:10 *M. Bitbol* “A quantum model for downward causation”

16:10 – 16:35 *T. W. Deacon* “Emergent dynamics”

16:35 – 17:00 *P. A. Corning* “The synergism hypothesis as a general theory of emergence in evolutionary processes”

17:00 – 17:30 Coffee Break

17:30 – 17:55 *H. Bersini* “Emergent phenomena only belong to biology”

17:55 – 18:15 Discussion among the panelists

18:15 – 19:50 Discussions in small groups and questions to the panelists

Dinner

## Monday 14 April 2008

*Second Session (Chairman: E. Ben-Jacob)*

09:15 – 09:40 *J. P. Dubucs* “Emergence and predictability”

09:40 – 10:05 *S. D. Mitchell* “Emergence: Logical, functional and dynamical accounts”

10:05 – 10:30 *B. P. McLaughlin* “Emergence, downward causation and mental causation”

10:30 – 10:55 *M. Bedau* “Pluralism about emergence”

10:55 – 11:20 Coffee Break

11:20 – 11:40 Discussion among the panelists

11:40 – 12:30 Discussions in small groups and questions to the panelists

Lunch

*Third Session (Chairman: M. Bedau)*

15:45 – 16:10 *P. Humphreys* “Emergence: A threefold taxonomy”

16:10 – 16:35 *P. Huneman* “Computational emergence and the evolutionary discontinuities”

16:35 – 17:00 *R. C. Richardson* “Modest and naturalized emergence”

17:00 – 17:25 Coffee Break

17:25 – 17:50 *P. Gailey* “Emergence as a context and condition for information”

17:50 – 18:10 Discussion among the panelists

18:10 – 19:50 Discussions in small groups and questions to the panelists

Dinner

**Tuesday 15 April 2008**

*Fourth Session (Chairman: M. Bitbol)*

09:15 – 09:40 *J. Walleczek* To be announced

09:40 – 10:00 *L. Damiano* “Life from emergence to co-emergence. Evolution of a descriptive pattern in the pioneer research on self-organization”

10:00 – 10:20 *L. Bich* “Emergence and the living organization. A theoretical and epistemological framework for biology”

10:20 – 10:55 *A. Stephan* “Emergence and reductive explanation – Emotions as a case in point”

10:55 – 11:20 Coffee Break

11:20 – 11:40 Discussion among the panelists

11:40 – 12:30 Discussions in small groups and questions to the panelists

Lunch

*Fifth Session (Chairman: J. Reisse)*

15:45 – 16:10 *E. Ben-Jacob* “Social behavior of bacteria: the complex origin of cognition”

16:10 – 16:35 *P. L. Luisi* “Teaching emergence to undergraduates”

16:35 – 17:00 *R. Batterman* “Reduction and emergence in physics”

17:00 – 17:25 Coffee Break

17:25 – 17:50 *D. Batten* “Demystifying Emergence”

17:50 – 18:10 Discussion among the panelists

18:10 – 19:50 Discussions in small groups and questions to the panelists

Dinner

### **Wednesday 16 April 2008**

*Facit and Outlook (Chairman: H. Bersini)*

09:15 – 10:25 Panelists discuss what they have learned and/or modified in their view, thanks to the meeting (10 minutes each).

10:25 – 10:55 Final discussion among participants and panelists

10:55 – 11:15 Coffee Break

11:15 – 11:30 Closure of the meeting, final remarks (P. L. Luisi, H. Bersini)

Lunch and Departure