

**Two-Day Workshop to celebrate the 60th anniversary of the paper on dynamical maps
by E. C. G. Sudarshan, P. M. Mathews and J. Rau
October 14-15, 2021**

Programme

Thursday, 14 October 2021
(Central European Time: GMT+2)

- 15.00-15.05 Karol Życzkowski (Kraków, Poland)
Opening Address
- 15.05-15.40 Guests of Honor
P. M. Mathews, Jayaseetha Rau (Authors of the celebrated paper)
G. Bhamathi, Ashok Sudarshan (Family of E. C. G. Sudarshan)
- 15.40-16.10 Saverio Pascazio (Bari, Italy)
The dynamics of quantum mechanical systems
- 16.15-16.45 Arul Lakshminarayan (Chennai, India)
*Dual and multi-unitary operators, from entanglement to many-body physics,
as a legacy of the SMR paper*
- 16.50-17.10 —COFFEE BREAK—
- 17.10-17.40 Adrián A. Budini (Bariloche, Argentina)
*Memory effects and bidirectional information flows: an approach from Past-Future
Correlations*
- 17.45-18.15 Fabio Benatti (Trieste, Italy)
Open spin chain asymptotic states
- 18.20-18.50 A. R. P. Rau (Baton Rouge, USA)
Geometries and Constructions of Dynamical Maps including Dissipation

Friday, 15 October 2021
(Central European Time: GMT+2)

- 11.00-11.30 Daniel Burgarth (New South Wales, Australia)
The Quantum Zeno Effect and its applications in Quantum Control
- 11.35-12.05 Dariusz Chruściński (Toruń, Poland)
*Universal constraint for relaxation rates of quantum dynamical semigroups I:
A physical manifestation of complete positivity*
- 12.10-12.40 Gen Kimura (Saitama, Japan)
*Universal constraint for relaxation rates of quantum dynamical semigroups II:
Based on r -function approach*
- 12.45-14.00 —LUNCH BREAK—
- 14.00-14.30 Sabrina Maniscalco (Helsinki, Finland)
*Learning to measure: A new adaptive approach to extract information in quantum
algorithms for near-term quantum computers*
- 14.35-15.05 Jyrki Piilo (Turku, Finland)
Quantum jumps and rate operators in open quantum system dynamics
- 15.10-15.40 Sergey N. Filippov (Moscow, Russia)
*Trace decreasing dynamical maps: Entanglement dynamics and quantum
communication rate*
- 15.45-16.00 Francesco Petruccione (Durban, South Africa)
Closing Remarks