## Computation, Physics and Beyond

## Program of the International Workshop on Theoretical Computer Science (WTCS 2012)

Venue: Building 303S Room 561 (Computer Science Meeting Room) All talks planned for 45 minutes for possible coffee breaks in between. Tuesday February 21 (afternoon) V.I.P.Hermann Maurer Calude as Father of One of the Computer Science Journals .....1:10pm Douglas S. Bridges and Luminita S. Vîță V. Kruglov, K. A. Makarov, B. Pavlov and A. Yafyasov Wednesday February 22 (morning) Cezar Câmpeanu A Note on Blum Static Complexity Measures ...... 9am Ziyuan Gao, Frank Stephan, Guohua Wu and Akihiro Yamamoto Rūsiņš Freivalds Hartmanis-Stearns Conjecture on Real Time and Transcendence ....11am Wednesday February 22 (afternoon) Helmut Jürgensen Barry Cooper Mathematics, Metaphysics and the Multiverse ................. 2pm

Haiming Chen and Sheng Yu  Derivatives of Regular Expressions and An Application 3pm
Wednesday February 22 (evening)
Conference Dinner Mecca DevonPort (1 Victoria Road, Devonport)
Thursday February 23 (afternoon)
Stephen Wolfram Is the Universe Like $\pi$ or $\Omega$ ? (video)
Kohtaro Tadaki Phase Transition between Unidirectionality and Bidirectionality 1pm
Ludwig Staiger On Oscillation-free Chaitin <b>h</b> -random Sequences 2pm
Marius Zimand Symmetry of Information: A Closer Look
Friday February 24 (morning)
Jacques Patarin Some Transfinite Generalisations of Gödel's Incompleteness Theorem 9an
Giuseppe Longo and Maël Montévil Randomness Increases Order in Biological Evolution
Karl Svozil Haunted Quantum Contextuality Versus Value Indefiniteness11an
Friday February 24 (afternoon)
Michael J. Dinneen A Program-Size Complexity Measure for Mathematical Problems and Conjectures
Solomon Marcus The Art of Reaching the Age of Sixty (recorded video) 2pm
Any Survivors  Domain BBQ with Department of Computer Science 4pn