



Contribution ID: 234

Type: **Oral (Non-Student) / orale (non-étudiant)**

## Quantum Control of Wave-Particle Duality

*Tuesday, 17 June 2014 10:30 (15 minutes)*

Wave-particle duality, superposition and entanglement are among the most counterintuitive features of quantum theory. They clash with conventional classical wisdom and motivate the construction of hidden-variable theories. Here I point out that realism (defined as a property of photons being either particles or waves, but not both) is incompatible with determinism provided superluminal communication is forbidden. This places severe constraints on HV theories, which in turn can be subject to experimental tests using quantum delayed-choice experiments.

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**Session Classification:** (T1-6) Quantum Optics - DAMOPC / Optique quantique - DPAMPC

**Track Classification:** Division of Atomic, Molecular and Optical Physics, Canada / Division de la physique atomique, moléculaire et photonique, Canada (DAMOPC-DPAMPC)