

PhD on "Quantum correlations and quantum coherence in quantum information processing"

Tue, 2017-01-10 22:03 - [Marco Piani](#) [1] **At:** University of Strathclyde
Deadline: 17 February, 2017

Location

University of Strathclyde Glasgow United Kingdom
55° 51' 51.2532" N, 4° 15' 6.5016" W
See map: [Google Maps](#) [2]

Quantum correlations and quantum coherence in quantum information processing

Quantum correlations — including quantum entanglement, quantum non-locality, and quantum steering — and quantum coherence are at the core of quantum mechanics, and nowadays find application in newly developed quantum technologies, which go from quantum cryptography, to quantum metrology, to quantum computing. The project regards the operational qualitative and quantitative characterization of such fundamental quantum phenomena, leading to a better understand and exploitation of such properties, in particular in — but not limited to — the area of metrology in noisy conditions.

Applications should be submitted as soon as possible through <http://pgr.strath.ac.uk/>
There is a soft deadline of 10 February 2017, but application will be accepted until the position is filled.

Informal inquires can be made to Marco Piani ([marco \[dot\] piani \[at\] strath \[dot\] ac \[dot\] uk](mailto:marco.piani@strath.ac.uk)) and to [pgstudies \[at\] phys \[dot\] strath \[dot\] ac \[dot\] uk](mailto:pgstudies@phys.strath.ac.uk).

Dr Piani (<http://cnqo.phys.strath.ac.uk/people/academic-staff/marco-piani/> [3]) is part of the Computational Non-linear and Quantum Optics (CNQO) group (<http://cnqo.phys.strath.ac.uk> [4]), within the Optics division (<http://www.strath.ac.uk/physics/research/opticsdivision/> [5]) of the Department of Physics (<http://www.strath.ac.uk/physics/> [6]).

Strathclyde's Physics department has been ranked first in UK for quality in the recent REF 2014 assessment. Strathclyde is also the only university involved in all the four newly established UK Quantum Technology Hubs (<https://www.epsrc.ac.uk/newsevents/news/quantumtechhubs/> [7]). Finally, Strathclyde is part of the International Max Planck Partnership in Measurement and Observation at the Quantum Limit (<http://www.strath.ac.uk/physics/research/internationalmaxplanckpartnership/> [8]), which involves five Scottish Physics Departments together with five Max Planck Institutes in Germany.

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Links:

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- [2] <http://maps.google.co.uk?q=%2C+Glasgow%2C+%2C+uk>
- [3] <http://cnqo.phys.strath.ac.uk/people/academic-staff/marco-piani/>
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