

Scientific Publications

Quantum violation of an instrumental test, R. Chaves, G. Carvacho, **I. Agresti**, V. Di Giulio, L. Aolita, S. Giacomini, F. Sciarrino, *Nature Physics* **14** (3), 291 (2018)

Tunable two-photon quantum interference of structured light, V. D'Ambrosio, G. Carvacho, **I. Agresti**, L. Marrucci, F. Sciarrino, *Physical Review Letters* **122** (1), 013601 (2019)

Pattern recognition techniques for boson sampling validation, **I. Agresti**, N. Viggianiello, F. Flamini, N. Spagnolo, A. Crespi, R. Osellame, N. Wiebe, F. Sciarrino, *Physical Review X* **9**, 011013 (2019)

Experimental learning of quantum states, A. Rocchetto, S. Aaronson, S. Severini, G. Carvacho, D. Poderini, **I. Agresti**, M. Bentivegna, F. Sciarrino, *Science Advances* **5** (3), eaau1946 (2019)

Experimental semi-device-independent tests of quantum channels, **I. Agresti**, D. Poderini, G. Carvacho, L. Sarra, R. Chaves, F. Buscemi, M. Dall'Arno, F. Sciarrino, *Quantum Science and Technology* **4** (3) (2019)

Device independent certification of a quantum delayed choice experiment, E. Polino, **I. Agresti**, D. Poderini, G. Carvacho, G. Milani, G.B. Lemos, R. Chaves, F. Sciarrino, *Physical Review A*, **100** (2), 022111 (2019).

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Experimental device-independent certified randomness generation with an instrumental causal structure, **I. Agresti**, D. Poderini, L. Guerini, M. Mancusi, G. Carvacho, L. Aolita, D. Cavalcanti, R. Chaves, F. Sciarrino, *Communications Physics*, **3** (110) (2020).

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Experimental robust self-testing of the state generated by a quantum network, **I. Agresti**, B. Polacchi, D. Poderini, E. Polino, A. Suprano, I. Šupić, J. Bowles, G. Carvacho, D. Cavalcanti, F. Sciarrino, *arXiv:2010.07737* (2020).

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Exclusivity graph approach to Instrumental inequalities, D. Poderini, R. Chaves, **I. Agresti**, G. Carvacho, F. Sciarrino, *Proceedings of Conference on Uncertainty in Artificial Intelligence (UAI)*, 2019.

Experimental Connection between the Instrumental and Bell Inequalities, **I. Agresti**, G. Carvacho, D. Poderini, L. Aolita, R. Chaves, F. Sciarrino, *Proceedings* **12**(1), 27 (2019).

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Quantum violation of an Instrumental test, R. Chaves, G. Carvacho, **I. Agresti**, V. Di Giulio, L. Aolita, S. Giacomini, F. Sciarrino. *Quantum Information and Measurement (QIM) V: Quantum Technologies*, S1B.4. (2019).