Personal Information

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Languages Spanish (Native), French (Fluent), English (Fluent) and Japanese (Basic skills).

Born on 21/02/1990, Mexican

Experience

2016-present Research assistant, Inria-Paris (Team QUANTIC), France.

April-June 2018 Visiting PhD student, Institut Henri Poincaré, trimester on quantum measurement and control,

France.

2012-2014 **Software engineer**, *Nuxiba Technologies*, Mexico City.

Education

2016-present **PhD candidate, Applied Mathematics**, *Ècole des Mines de Paris, Université Paris Sciences & Lettres*, France.

Advisors: Pierre Rouchon, Alain Sarlette (Inria-Paris)

2014-2016 MSc, Systems and Control, CINVESTAV - Instituto Politécnico Nacional , México City.

Advisor: Jorge A. León

2008-2012 **Engineering Diploma, Electrical Engineering**, *Instituto Tecnológico de Orizaba*, State of Veracruz,

México.

Publications

2018 Exponential stochastic stabilization of a two-level quantum system via strict Lyapunov control. With Alain Sarlette and Pierre Rouchon. In proceedings of 57th IEEE Conference on Decision and Control. Preprint arXiv:1803.07542

2017 Control de sistemas cuánticos abiertos. Chapter in "Modelos en Estadística y Probabilidad IV", Aportaciones Matemáticas, Serie Comunicaciones 51, pp. 109-138, ISBN: 978-607-02-9909-4.

Conference communications

2018 'Exponential stochastic stabilization of a two-level quantum system via strict Lyapunov control'. 57th IEEE Conference on Decision and Control. Miami, FL.

'Using noise assisted quantum feedback for exponential stabilization of quantum states', Poster presented at International Conference on Quantum Computation (ICoQC 2018). Ècole Normale Supérieure Paris

2016 'Control de sistemas cuanticos abiertos', Talk given at Analysis Seminar. Universidad Autónoma Metropolitana - Iztapalapa

Grants and Scholarships

2016-2019 Doctoral contract at Mines ParisTech.

2014-2016 CONACYT Master scholarship.