

Mr. Yuzhen Qin- Curriculum Vitae

Date of Birth: 20/08/1990

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EDUCATION

- **University of Groningen** the Netherlands
Ph.D. (supervisor: Prof. Ming Cao) Oct. 2015 – Dec. 2019
- **Wuhan University** China
Master of Control engineering Sep. 2012 – Jun. 2015
- **Hohai University** China
Bachelor of Automatic Control Sep. 2008 – Jun. 2012

SUPERVISION OF STUDENTS

- **Master Student** Feb. 2017 - Sep. 2017
 - **Athanasios Bachoumis**: thesis “Phase synchronization in a sequence of cognitive stages”
- **Bachelor Students** Dec. 2017 - Jul. 2018
 - **Ricardo Ernesto Bustamante Cisneros**: thesis “Entrainment for neural activities in the brain”
 - **Gait Huls**: thesis “The application of the lower dimensional model to the phenomenon of brain synchronization”

PRESENTATIONS

- **Conferences Presentations**
 - “**Stability of remote synchronization in star networks of Kuramoto oscillators**”: the 57th IEEE Conference on Decision and Control, Miami Beach, FL, USA, 2018.
 - “**Partial phase cohesiveness in networks of communitinized Kuramoto oscillators**”: IEEE European Control Conference, Limassol, Cyprus, 2018.
 - “**Asynchronous agreement through distributed coordination algorithms associated with periodic matrices**”: the 20th IFAC Congress, Toulouse, France, 2017.
 - “**Partial synchronization in networks of networks of Kuramoto oscillators**” : the 36th Benelux Meeting on Systems and Control, Spa, Belgium, 2018.
 - “**Stochastic asynchronous agreement**”: the 35th Benelux Meeting on Systems and Control, Soesterberg, the Netherlands, 2017.

PUBLICATIONS

- **Journal papers**
 - [1] **Y. Qin**, M. Cao, B. D.O. Anderson, D. S. Bassett, F. Pasqualetti, “Mediated Remote Synchronization of Kuramoto-Sakaguchi Oscillators: The Number of Mediators Matters”, IEEE Control Systems Letters, 2020, 5(3): 767-772.
 - [2] **Y. Qin**, Y. Kawano, O. Portoles and M. Cao. “Partial phase cohesiveness in networks of Kuramoto oscillator networks.” submitted to IEEE Transactions on Automatic Control.
 - [3] **Y. Qin**, Y. Kawano, M. Cao, and B. D. O. Anderson. “Partial stability of nonlinear systems via averaging and its applications in remote synchronization of Kuramoto-oscillator networks.” submitted to IEEE Transactions on Automatic Control.
 - [4] **Y. Qin**, M. Cao, and B. D. O. Anderson, “Lyapunov criterion for stochastic systems and its applications in distributed computation.” IEEE Transactions on Automatic Control, doi: 10.1109/TAC.2019.2910948, **regular paper**.
 - [5] M. Ye, **Y. Qin**, A. Govaert, B. D. O. Anderson, and M. Cao. “An influence network model to study discrepancies in expressed and private Opinions,” Automatica, 107: 371-381, 2019, **regular paper**.

- **Conference papers**

- [1] **Y. Qin**, M. Cao, B. D.O. Anderson, D. S. Bassett, F. Pasqualetti, “Mediated Remote Synchronization of Kuramoto-Sakaguchi Oscillators: The Number of Mediators Matters”, accepted by the 59th IEEE Conference on Decision and Control, 2020.
- [2] **Y. Qin**, Y. Kawano and M. Cao, “Stability of remote synchronization in star networks of Kuramoto oscillators,” in Proceeding of the 57th IEEE Conference on Decision and Control, Miami Beach, FL, USA, 2018.
- [3] **Y. Qin**, Y. Kawano, and M. Cao, “Partial phase cohesiveness in networks of communitinized Kuramoto oscillators,” in Proceeding of IEEE European Control Conference, Limassol, Cyprus, 2018, pp. 2028-2033.
- [4] A Govaert, **Y. Qin**, and M. Cao. “Necessary and sufficient conditions for the existence of cycles in evolutionary dynamics of two-strategy games on networks,” in Proceeding of IEEE European Control Conference, Limassol, Cyprus, 2018, pp. 2182-2187.
- [5] **Y. Qin**, M. Cao, and B. D. O. Anderson, “Asynchronous agreement through distributed coordination algorithms associated with periodic matrices,” in Proceeding of the 20th IFAC World Congress, Toulouse, France, 2017, 50(1): 1742-1747.

PROFESSIONAL SERVICES

- **Reviewer for**

IEEE Transactions on Automatic Control; Automatica; Systems and Control Letters; IEEE Transactions on Industrial Electronics; IEEE Transactions on Systems, Man and Cybernetics; IEEE Conference on Decision and Control 2019; American Control Conference 2019.

TEACHING

- **Teaching assistant at University of Groningen** Feb. 2016-Apr. 2019
 - **Modelling and Analysis of Complex Networks**: course code TBMACN-11.

Referees available on request