# Christophe ZHANG Christophe.zhang@polytechnique.org

## **EDUCATION**

2017-2018: One-year training program in public administration with the french Corps des Mines.

2017: Academic guest at the FIM (ETH Zürich).

Since 2016: PhD under the supervision of Jean-Michel Coron (LJLL).

2015-2016: Graduate studies at Sorbonne Université (former UPMC), in applied mathematics (M2

mathématiques de la modélisation), with a major in control theory.

May 2015: Recruited by the Corps des Mines.

2014-2015: Graduate studies in mathematics at the **Ecole polytechnique**.

2012: Undergraduate studies in mathematics, physics, and computer science at the **École** 

polytechnique.

### **TEACHING**

2017: Assistant for the course Measure and integration (Prof. Dr. Schweizer) at ETH Zürich.

2013-2015: Oral examinator in mathematics at Lycée Sainte-Geneviève.

# **RESEARCH**

Internal control and stabilization of hyperbolic PDEs and systems, in particular semilinear systems, or coupled systems.

Keywords: hyperbolic systems, nonlinear systems, indirect control, internal control, feedback stabilization.

#### **PUBLICATIONS**

## Published articles:

Internal controllability of systems of semilinear coupled one-dimensional wave equations with one control. <u>SIAM</u> <u>J. Control Optim.</u> <u>56 (2018)</u>, no. 4, 3092–3127.

#### Preprints:

Internal rapid stabilization of a 1-D linear transport equation with a scalar feedback. Preprint, October 2018. <a href="https://hal.archives-ouvertes.fr/hal-01905098">https://hal.archives-ouvertes.fr/hal-01905098</a>.

Finite-time internal stabilization of a linear 1-D transport equation. Preprint, January 2018. <a href="https://hal.archives-ouvertes.fr/hal-01980349">https://hal.archives-ouvertes.fr/hal-01980349</a>

### PROJECTS AND INTERNSHIPS

2015-2016: Internship at La Grande Épicerie de Paris (curriculum of the Corps des mines).

Summer 2014: Internship at the Beijing R&D center of Gemalto.

2012-2013: Served as officer cadet in the Gendarmerie Nationale (French military police force).

# **LANGUAGES**

French/English: bilingual; German: C1 certification (Goethe Institut Prüfung); Chinese: spoken.

### **ACTIVITIES AND INTERESTS**

Music: Proficient piano player: several awards at international competitions, frequent concerts.

Assistant conductor of the Orchestre du Plateau de Saclay.

Associations: Board member of the Fédération Francophone de Débat and the French Debating Association.

Sports: Swimming.