### Personal data

• Name: Daniel

o Surname: Estévez

o Birthdate: 14/07/1989, Madrid, Spain

Telephone: +34 91 497 2806Email: daniel.estevez@uam.es

#### Education

2013–present **PhD in Mathematics**, *Universidad Autónoma de Madrid*.

Advisor: Dmitry Yakubovich

2012–2013 MSc in Mathematics, Universidad Autónoma de Madrid.

MSc Thesis: Complex analysis techniques in the spectral theory of linear operators.

Advisor: Dmitry Yakubovich. Grade: 10 (scale 0–10)

2007–2012 BSc in Mathematics, Universidad Autónoma de Madrid.

Grade: 9.63 (scale 0–10)

2007–2012 BSc in Computer Science Engineering, Universidad Autónoma de Madrid.

Grade: 9.63 (scale 0–10)

# Employment

2016—present **Profesor ayudante** (teaching assistant), Mathematics Department, Universidad Autónoma de Madrid.

#### **Publications**

- D. Estévez, D.V. Yakubovich, *Decay rate estimations for linear quadratic optimal regulators*, Linear Algebra Appl. 439 (2013), no. 11, 3332–3358.
- M. Dritschel, D. Estévez, D. Yakubovich, *Traces of analytic uniform algebras on subvarieties and test collections*, to appear in J. London. Math. Soc. Preprint available at arXiv:1505.01838.
- D. Estévez, Explicit traces of functions on Sobolev spaces and quasi-optimal linear interpolators, to appear in Math. Ineq. Appl. Preprint available at arXiv:1211.1498.

## Preprints

M. Dritschel, D. Estévez, D. Yakubovich, Tests for complete K-spectral sets, October 2015, arXiv:1510.08350.

### Teaching

Spring 2017 Linear Algebra (problems), Universidad Autónoma de Madrid.

Degree in Mathematics and Computer Science, 1st year

- Fall 2016 Algebra I (problems), Universidada Autónoma de Madrid.

  Degree in Physics, 1st year
- Spring 2016 **Differential Equations (problems; in English)**, Universidad Autónoma de Madrid.

  UAM-Boston University international program
- Spring 2016 Linear Algebra (problems), Universidad Autónoma de Madrid.

  Degree in Mathematics and Computer Science, 1st year
- Spring 2015 **Analysis II (problems)**, Universidad Autónoma de Madrid. Degree in Physics, 1st year
- Spring 2014 Analysis II (problems), Universidad Autónoma de Madrid. Degree in Physics, 1st year

# Research stays

Fall 2015 Newcastle University (United Kingdom), 3 month stay with M. Dritschel

## Talks given

- June 2016 "Conditions for similarity to a normal operator involving resolvent estimates", Operator Theory 26th international conference, West University, Timisoara (Romania)
- October 2015 "Generation of algebras and separation of singularities", Analysis Seminar, Newcastle University (United Kingdom)
  - July 2015 "Separation of singularities, generation of algebras and complete K-spectral sets", IWOTA 2015, Ivane Javakhishvili Tbilisi State University, Tbilisi (Georgia)
  - May 2015 "Separation of singularities, generation of algebras and complete K-spectral sets", XVI Encuentro de Análisis Real y Complejo, Carmona, Sevilla
  - July 2014 "Separating structures and operator vessels", IWOTA 2014, VU University, Amsterdam (The Netherlands)
  - June 2014 "Separation of singularities, generation of algebras and complete K-spectral sets", 11th Advanced Course in Operator Theory and Complex Analysis, Universidad de Sevilla
  - September "Complex analysis techniques in the spectral theory of operators", Workshop of Young
    - 2013 Researchers in Mathematics 2013, Universidad Complutense de Madrid
  - May 2013 "The extension problem in Sobolev spaces and quasi-optimal interpolators", Hilbert Function Spaces 2013 conference, Gargnano (Italy)
  - March 2013 "The extension problem in Sobolev spaces and quasi-optimal interpolators. , Analysis and Applications Seminar, Universidad Autónoma de Madrid
    - June 2011 "Localization of zeros of rational functions and the study of the quality of an optimal linear quadratic regulator", Complex Analysis Seminar, Universidad Autónoma de Madrid

### Grants

- 2013–2016 Post-graduate Grant of International Excellence in Mathematics, Mathematics Department of the Universidad Autónoma de Madrid.

  Grant for the study of the PhD in Mathematics
- 2012–2013 Post-graduate Grant of International Excellence in Mathematics, Mathematics Department of the Universidad Autónoma de Madrid.

  Grant for the study of the MSc in Mathematics

- 2011-2012 Excellence Grant of the Community of Madrid.
  - Summer JAE Intro ICMAT Grant of introduction to research, Institute of Mathemat-2011 ical Sciences (CSIC).
    - "Non free interpolation in Sobolev and Hardy spaces", Researcher: Dmitry Yakubovich.
- 2010-2011 Excellence Grant of the Community of Madrid.
- Summer JAE Intro Grant of introduction to research, Institute of Mathematical Sciences 2010 (CSIC).
  - "Applications of complex analysis to linear control problems", Researcher: Dmitry Yakubovich.
- 2009–2010 Excellence Grant of the Community of Madrid, Mathematics Department of the Universidad Autónoma de Madrid.
  - "The study of the quality of an optimal linear quadratic regulator", Tutor: Dmitry Yakubovich.
- 2008–2009 Excellence Grant of the Community of Madrid, Mathematics Department of the Universidad Autónoma de Madrid.
  - "The study of the quality of an optimal linear quadratic regulator", Tutor: Dmitry Yakubovich.
- 2007–2008 Excellence Grant of the Community of Madrid, Mathematics Department of the Universidad Autónoma de Madrid.

  "Continuation methods for the Newton method in the resolution of non linear equation systems",
  Tutor: Dmitry Yakubovich.

#### Conferences

- June 2016 Operator Theory 26th international conference, West University, Timisoara (Romania)
- November Scottish Operator Algebras Research meeting, Glasgow University (United Kingdom) 2015
- October 2015 North British Functional Analysis Seminar, Newcastle University (United Kingdom)
  - July 2015 IWOTA 2015, Tbilisi (Georgia)
  - May 2015 XVI Encuentro de Análisis Real y Complejo, Carmona, Sevilla
  - September Harmonic Analysis, PDEs and Vision International Workshop, Universidad Autónoma 2014 de Madrid
  - July 2014 IWOTA 2014, VU University, Amsterdam (The Netherlands)
  - June 2014 11th Advanced Course in Operator Theory and Complex Analysis, Universidad de Sevilla
  - May 2014 Analytic Functions and Quasiconformal Mappings, Universidad Autónoma de Madrid
  - September Workshop of Young Researchers in Mathematics 2013, Universidad Complutense de
    - 2013 Madrid
  - May 2013 Hilbert Function Spaces 2013, Gargnano (Italy)

#### Courses

- Fall 2015 E. Kakariadis, "Learning seminar:  $C^*$ -correspondences", Newcastle University (United Kingdom)
- October 2014 N. Nikolski, "Sublinear dimension growth in the KMT (Kreiss Matrix Theorem)", Universidad Autónoma de Madrid
- October 2014 N. Nikolski, "Towards a numerization of the Gelfand theory", Universidad Autónoma de Madrid

May 2014 A. Aleman, "Invariant subspaces for the shift operator", Universidad Autónoma de Madrid

Fall 2013 D. Vukotic, "Advanced analysis course in the MsC in mathematics", Universidad Autónoma de Madrid

October 2013 P. Duren, "Robin Capacity", Universidad Autónoma de Madrid

October 2012 M. Mitrea y D. Mitrea (Univ. of Missouri-Columbia), "School on Elliptic Partial Differential Equations", ICMAT

Summers JAE Summer School, ICMAT

2010, 2011,

2012

# Languages

Spanish First language

English Fluent

First Certificate in English. Grade A.

## Competitions

July 2011 18th International Mathematics Competition for University Students, Blagoevgrad, Bulgaria. *Third Prize* 

July 2010 17th International Mathematics Competition for University Students, Blagoevgrad, Bulgaria. *Honorable Mention* 

### Others

- o Second National Prize to the best BSc in Computer Science Engineering
- Honorable Mention and Prize "Professor Javier Martínez" to the best academic record of the 6th Promotion of Computer Science Engineers and Mathematics Graduates in the Universidad Autónoma de Madrid