Report of the academic activity during the PhD programme 2017-2020

PhD Student: Chalmoukis Nikolaos  
Supervisor: Prof. Nicola Arcozzi  
Tutor: Prof. Nicola Arcozzi  
Circle: 33°

1. Courses and seminars followed

- *Hodge Theory*  
  Duration: 30h  
  Place: University of Bologna  
  Period: Spring 2017 - 2018  
  Professor: Luca Migliorini

- *Partial differential equations*  
  Duration: 30h  
  Place: University of Bologna  
  Period: Spring 2017 - 2018  
  Professor: Maria Manfredini

- *The De Branges Theory of Hilbert Spaces of Entire Functions and its Applications to Spectral Theory of differential Operators*  
  Duration: 10h  
  Place: University of Bologna  
  Period: Spring 2018-2019  
  Professor: Anton Baranov

- *Functional Analysis and Complex Analysis*  
  Duration: 10h  
  Place: University of Bologna  
  Period: Spring 2018-2019  
  Professor: Nicola Arcozzi

1. Courses and seminars given

I gave the series of minicourses

- *An introduction to interpolation by sequences in reproducing kernel Hilbert spaces*  
  Duration: 10h  
  Place: University of Bologna  
  Period: November 2019 - January 2020
Lectures available online: https://site.unibo.it/complex-analysis-lab/en/contents/videos

- *Introduction to the theory of complete Pick spaces*
  Duration: 10h
  Place: Aristotle University of Thessaloniki
  Period: June 2020

Also, I followed the series of seminars *Topics in Mathematics* and other seminars organized by the department, in particular the ones organized by the Complex Analysis Lab, the group of complex analysis of the U. of Bologna, of which I am a member.

2. Conferences

- *Workshop su varietà reali e complesse: Geometria, topologia e analisi armonica*
  Place: Pisa, Scuola Normale Superiore
  Period: February 1 2018 - February 3 2018

- *Analysis Days in Piemonte*
  Place: Piemonte
  Period: May 7 2018 - May 11 2018
  I gave a talk entitled "Interpolation in the Dirichlet space on the unit disc".

- *Workshop on complex analysis and operator theory*
  Place: Barcelona
  Period: May 26 2018- May 30 2018

- *Advanced courses in operator theory and complex analysis XVI edition*
  Place: Universita di Bologna, Italy
  Period: June 11 - June 14 2018

- *New developments in complex analysis and function theory*
  Place: University of Crete, Greece
  Period : July 2 2018- July 6 2018

- *Workshop su varietà reali e complesse: Geometria, topologia e analisi armonica*
  Place: Pisa, Scuola Normale Superiore
  Period : February 21 2019 - February 23 2019
• *Explorations in Harmonic Analysis and other realms*
  Place: Tel Aviv, Israel
  Period: February 10- February 14, 2019

• *Analysis Days in Piemonte*
  Place: Piemonte
  Period: May 27 2019 - May 31 2019
  I gave a talk entitled "Interpolation in the Dirichlet space on the unit disc".

• *Advanced courses in operator theory and complex analysis XVI edition*
  Place: U. Paris-Est Marne-la-Valle, France
  Period: June 17 - June 21 2019
  I gave a talk entitled "Onto Interpolation for the Dirichlet space and for Sobolev W1,2(D)".

• *Indam day 2019*
  Place: Bari, Italy
  Period: June 3 2019

• *Quaternioni sul Conero*
  Place: Ancona, Italy
  Period: September 12-13, 2019

• *New Trends in Complex Analysis and Fourier Analysis and Operator Theory*
  Place: Rome, Italy
  Period: September 23 - 27 2019

• *Workshop: "Emergent Trends in Complex Function Theory*
  Place: Barcelona, Spain
  Period: October 28-31, 2019

• *Interpolation in Spaces of Analytic Functions*
  Place: CIRM, Marseille, France
  Period: November 18-22, 2019

• *Emergent trends in complex function theory*
  Place: Centre de Recerca Matemtica
  Period : October 28 2019 - October 31 2019
  Talk given: Onto interpolation for the Dirichlet space and for W^{1,2}(\mathbb{D}), (contributed talk).
Interpolation in Spaces of Analytic Functions
Place: Centre International de Rencontres Mathmatiques, Marsail, France
Period: 18 - 22 November 2019
Talk given: Random interpolation for the Dirichlet space, (contributed talk).

3. Invited talks

- Random Interpolating sequences in Dirichlet spaces
  Seminars: OnLine seminar on complex analysis and applied topics.
  Time: May 2020
  Seminar available online at: https://www.youtube.com/channel/UCiRdqBeNxBaafY-SN6mg/

- Interpolating sequences for the Dirichlet space and for Sobolev $W^{1,2}(\mathbb{D})$
  Seminar: Weakly Seminar of functional analysis.
  Place: Saarland University
  Time: June 2020.

4. Period Abroad

- University of Bordeaux
  Period: 10 - 24 February 2020
  Collaborators: Prof. Andreas Hartman, Prof. Karim Kellay

- Aristotle University of Thessaloniki
  Period: June 2020
  Collaborators: Prof. Aristomenis Siskakis

4. Papers and Preprints


- N. Chalmoukis, Onto Interpolation for the Dirichlet space and for $W^{1,2}(\mathbb{D})$, 2018arXiv180708193C, (Preprint)