

# Laura D'Angelo

## CURRICULUM VITAE

### Contact Information

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University of Padova  
Department of Statistics  
via Cesare Battisti, 241-243  
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### Current Position

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*October 2018 - November 2021*

**PhD Student in Statistical Sciences, University of Padova.**

*Thesis title: Bayesian modeling of calcium imaging data*

Supervisor: Prof. Antonio Canale

Co-supervisor: Prof. Michele Guindani.

### Research interests

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- Statistical modeling
- Bayesian statistics
- Bayesian nonparametrics
- Computational statistics

### Education

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*October 2015 – November 2017*

**Master's (laurea specialistica/magistrale) degree in Statistical Science .**

University of Padova, Department of Statistics

Title of dissertation: “Modelli Bayesiani nonparametrici: applicazioni al settore assicurativo ”

Supervisor: Prof. Antonio Canale

Final mark: 110/110 cum laude.

*October 2012 – September 2015*

**Bachelor's degree (laurea triennale) in Statistics, Economics and Finance.**

University of Padova, Department of Statistics

Title of dissertation: “L'area sotto la curva ROC specifica per caratteristiche”

Supervisor: Prof. Gianfranco Adimari

Final mark: 110/110 cum laude.

### Visiting periods

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*January 2020 – November 2020*

University of California, Irvine;

Irvine, CA (USA).

Supervisor: Prof. Michele Guindani.

## Work experience

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*January 2018 – September 2018*

**BIP S.p.A..**

Consultant, data analyst.

## Awards and Scholarship

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*July 2021 - ISBA 2021 World Meeting.*

ISBA 2021 Best Student/Postdoc Contributed Paper Award.

## Computer skills

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- R (advanced)
- C++, GitHub, Python (working level)

## Language skills

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Italian: native;

English: fluent.

## Publications

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### Articles in journals

D'Angelo L. and Canale A. (2021) Contributed Discussion on: “Centered partition processes: informative priors for clustering”, in *Bayesian Analysis*, **16**(1), 356–358.

D'Angelo L., Canale A., Yu Z. and Guindani M. (2021) Detection of neural activity in calcium imaging data via Bayesian mixture models, in *Book of Short Papers SIS 2021* (Editors: Perna C., Salvati N., Schirripa Spagnolo F.), ISBN: 9788891927361.

D'Angelo L. (2019) Model based clustering in group life insurance via Bayesian nonparametric mixtures, in *Book of Short Papers SIS 2019* (Editors: Arbia, G., Peluso, S., Pini, A. and Rivellini, G.), ISBN: 978889191510.

### Working papers

D'Angelo L., Canale A., Yu Z. and Guindani M. (2021) Bayesian nonparametric analysis for the detection of spikes in noisy calcium imaging data. *arXiv preprint arXiv:2102.09403*

D'Angelo L. and Canale A. (2021) Efficient posterior sampling for Bayesian Poisson regression. *arXiv preprint arXiv:2109.09520*

## Conference presentations

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D'Angelo L., Canale A., Yu Z. and Guindani M. (2021). Bayesian nonparametric analysis for the detection of spikes in noisy calcium imaging data. (contributed talk) *JSM 2021*, August 8 - 12, 2021.

D'Angelo L., Canale A., Yu Z. and Guindani M. (2021). Bayesian nonparametric analysis for the detection of spikes in noisy calcium imaging data. (contributed talk) *ISBA 2021 World Meeting*, June 23 - July 2, 2021. Pre-recorded video available at <https://youtu.be/SLLSJVuFnMs>.

D'Angelo L., Canale A., Yu Z. and Guindani M. (2021). Detection of neural activity in calcium imaging data via Bayesian mixture models. (contributed talk) *SIS 2021 Intermediate meeting*, Pisa, Italy, June 21 - 25, 2021.

D'Angelo L. (2019). Model based clustering in group life insurance via Bayesian nonparametric mixtures. *SIS 2019 Intermediate meeting*, Milan, Italy, June 12-14, 2019.

## Teaching experience

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*April 2021*

Tirocinio formativo

use of Latex for scientific writing, 2.5 hours

University of Padova

## Other Interests

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Member of LIPU (Lega Italiana Protezione Uccelli) since 2019.

Volunteer for the project Lipu LIFE Choo-na in 2019.

## References

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### **Prof. Antonio Canale**

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### **Prof. Michele Guindani**

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Donald Bren School of Information and Computer Sciences; Irvine, CA 92697-1250

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