VALERIO DOSE - CURRICULUM VITAE (Aug-2024)
ai fini della pubblicazione

Valerio Dose

Current Position

Assistant Professor (RTDA) – "Sapienza" Universty of Rome – Department of Computer, Control and Management Engineering

Education

Ph. D. in Mathematics – University of Rome "Tor Vergata" – February 2015

Master of Mathematics – University of Rome "Tor Vergata" – July 2010 – score: 110/110 e lode

Bachelor of Mathematics – University of Rome "Tor Vergata" – July 2008 – score: 110/110 e lode

Qualifications

France: Qualification - Maître de conférences – Section 25 (Mathématiques) - N. 20225346012 – 21/01/2020

Research Activity

01/07/2021-: Assistant Professor (RTDA) – "Sapienza" University of Rome – Department of Computer, Control and Management Engineering

15/02/2018-14/02/2021: Postdoctoral Researcher - LUISS "Guido Carli" – Department of Economics and Finance.

01/10/2016-30/09/2017: Postdoctoral Researcher "Ing. Giorgio Schirillo" - INdAM – Istituto Nazionale di Alta Matematica.

01/09/2015-31/08/2016: Postdoctoral Researcher "Ing. Giorgio Schirillo" - INdAM – Istituto Nazionale di Alta Matematica.

10/2013-12/2013: Visiting at Mathematisch Instituut of Universiteit Leiden, The Netherlands.

03/2012-05/2012: Visiting at Universitat Politècnica de Catalunya (UPC), Barcelona, Spain.

11/2010-02/2015: Ph. D. student - Department of Mathematics, University of Rome "Tor Vergata".

Teaching Activity

05/2024-: Professor (Nonatomic Congestion Games) – "Sapienza" Universty of Rome – Department of Computer, Control and Management Engineering (PhD program in Automatic Control, Bioengineering and Operations Research (ABRO))

09/2021-: Professor (Analisi Matematica, Geometria) - "Sapienza" Universty of Rome – Department of Computer, Control and Management Engineering (bachelor's degree in Management Engineering, bachelor's degree in Computer and Control Engineering).

02/2021-06/2021: Adjunct Professor (Games and Strategies) – LUISS "Guido Carli" – Department of Economics and Finance (bachelor's degree in Economics and Business).

09/2018-06/2021: Adjunct Professor (Mathematics 1) – LUISS "Guido Carli" – Department of Economics and Finance.

10/2017-09/2018: Adjunct Professor (Fondamenti di Matematica e Statistica) – "Sapienza" University of Rome – Department of Chemistry and Pharmaceutical Technologies.

10/2017-09/2018: Teaching Assistant (Geometria) – University of Rome "Tor Vergata" – Faculty of Engineering.

10/2017-09/2018: Teaching Assistant (Matematica) – LUISS "Guido Carli"- Department of Business and Management.

10/2014-01/2015: Teaching Assistant (Geometria) - University of Rome "Tor Vergata" – Faculty of Engineering.

10/2014-01/2015: Teaching Assistant (Geometria) – "Sapienza" University of Rome – Faculty of Engineering.

Publications and Preprints

R. Cominetti, V. Dose, M. Scarsini. **The Price of Anarchy in Routing Games as a Function of the Demand.** *Math. Program.* **203** (2024). 531-558. https://doi.org/10.1007/s10107-021-01701-7

R. Cominetti, V. Dose, M. Scarsini. **Monotonicity of Equilibria in Nonatomic Congestion Games.** *Eur. J. Oper. Res.* **316** (2024), No. 2. 754-766. https://doi.org/10.1016/j.ejor.2024.01.050

R. Cominetti, V. Dose, M. Scarsini. **Phase Transitions of the Price-of-Anarchy Function in Multi-Commodity Routing Games.** *Transp. Res. Part B.* **182** (2024). https://doi.org/10.1016/j.trb.2024.102922

V. Dose, G. Lido, P. Mercuri. **Automorphisms of Cartan modular curves of prime and composite level.** *Algebra Number Theory.* **16** (2022), No. 6, 1423–1461.

V. Dose, G. Lido, P. Mercuri, C. Stirpe. **Modular Curves with many points over finite fields.** *J. of Algebra.* **635** (2023), 790-821.

V. Dose, P. Mercuri, A. Pal, C. Stirpe. **High order elements in Finite Fields arising from Recursive Towers.** *Design Codes and Cryptography.* **90** (2022), 1347-1368.

V. Dose, P. Mercuri, C. Stirpe. **Double Covers of Cartan Modular Curves.** *J. Number Theory.* **195** (2019), 96-114.

V. Dose. **On the automorphisms of the nonsplit Cartan modular curves of prime level.** *Nagoya Math. J..* **224** (2016), no. 1, 74-92.

V. Dose, J. Fernández, J. González, R. Schoof. **The automorphism group of the non-split Cartan modular curve of level 11.** *J. of Algebra.* **417** (2014), 95-102.

V. Dose, N. Green, M. Griffin, T. Mao, L. Rolen, J. Willis. **Singular moduli for a distinguished non-holomorphic modular function.** *Proc. Amer. Math. Soc..* **143** (2015), no.3, 965-972.

R. Cominetti, V. Dose, M. Scarsini. **The Price of Anarchy in Routing Games as a Function of the Demand.** *Accepted in WINE 2019,* Abstract *published in LNCS 11920.* Springer.

V. Dose. **Optimal Traffic Conditions in Two-Link Parallel Networks with Polynomial Costs.** *preprint.* (2023)

V. Dose (written by M. Anwar). **Automorphisms of non-split Cartan modular curves.** *Proceedings of the Roman Number Theory Association.* 1 (2016), no. 1, 17-21. IF PRESS. ISBN: 978-88-6788-077-5

C. Mauduit (written by V. Dose). **Automata and Number Theory.** *Proceedings of the Roman Number Theory Association.* 1 (2016), no. 1, 17-21. IF PRESS. ISBN: 978-88-6788-077-5

Scopus – 10 papers, 37 citations, h-index 4

Google Scholar – 11 papers, 70 citations, h-index 5

Average Impact factor	1.616 (Scopus FWCI) – 2.0288 (Clarivate JIF)
Total Citations	37 (Scopus)
Average Citations per Product	3.7 (Scopus)
Hirsch (H) index	4 (Scopus)
Normalized H index*	0.4 (Scopus calcolato da dottorato 2015)

*H index divided by the academic seniority.

Editorial Activity

Reviewer for: Mathematical Programming, OMEGA, EJOR – European Journal of Operations Research, WINE 2020 – the 16th Conference on Web and Internet Economics, ESA 2022 – The European Symposium on Algorithms, ODS 2024 – Optimization and Decision Sciences - AIRO Springer Series.

Participation in Funded Research Projects

03/2024-03/2027: Principal Investigator – "Game Theoretic models and Optimization methods for Socially Responsible resource management" – "Sapienza" Univeristy of Rome.

05/2023-04/2024: Participant – "Limiting Behavior of Stochastic Dynamics in the Schelling Segregation Model" – GNAMPA–INdAM.

09/2020-12/2021: Participant – "Random walks on random games" – GNAMPA-INdAM.

08/2019-02/2021: Participant – "Algorithms, Games, and Digital Markets (ALGADIMAR)" – PRIN 2017 – MIUR.

02/2013-02/2015: Participant – "Geometria delle Varietà Algebriche" – PRIN 2010-2011 – MIUR.

Participations in Congresses and Presentations

07/2024: EURO 2024: 33rd European Conference on Operational Research – DTU, Copenhagen, Denmark - talk

01/2024: 26th Combinatorial Optimization Workshop – CNRS, Aussois, France

01/2023: Workshop on Optimization, Learning and Games – Universidad Adolfo Ibañez, Viña del Mar, Chile

09/2022: International Conference on Optimization and Decision Science (ODS2022) – Firenze, Italy - talk

07/2022: 19th Workshop on Advances in Continuous Optimization (EUROPT2022) – Nova SST, Portugal - talk

05/2022: 7th Workshop on Stochastic Methods in Game Theory – Centro Ettore Majorana, Erice, Italy - talk

12/2020: Annual Meeting PRIN "Algadimar" – online - talk

02/2020: 4th AIROYoung Workshop – Free University of Bolzano, Italy - talk

12/2019: WINE 2019: The 15th Conference on Web and Internet Economics – Columbia University, New York, USA - talk

11/2019: GAMENET Conference 2019, Institute of Information Theory and Automation, Prague, Czech Republic

09/2019: MAPLE2019 – Markets, Algorithms, Prediction, and Learning – Politecnico di Milano, Italy - talk

07/2019: Twenty Years of the Price of Anarchy - TUC, Chania, Crete, Greece - poster

05/2019: The 1st EUROYoung Workshop - IMUS, Sevilla, Spain - talk

12/2018: WINE 2018: The 14th Conference on Web and Internet Economics - University of Oxford, UK - poster

06/2017: Thematic Program in Kähler Geometry - University of Notre Dame, Indiana, USA

02/2017: MAGIC Seminar. Imperial College, London, UK - talk

05/2016: Giornate di Geometria Algebrica ed Argomenti Correlati XIII - Università di Catania, Italy - talk

09-10/2015: Modular Forms and Curves of Low Genus: Computational Aspects - ICERM, Brown University, RI, USA

09/2015: Third Italian Number Theory Meeting - Centro di Ricerca Matematica "Ennio de Giorgi", Scuola Normale Superiore, Pisa, Italy – talk

05/2015: The first mini-symposium of the Roman Number Theory Association. Università Europea di Roma, Italy - talk

03/2015: Arizona Winter School 2015: Arithmetic and Higher-dimensional Varieties - University of Arizona, Tucson, USA

03/2013: Arizona Winter School 2013: Modular forms and modular curves - University of Arizona, Tucson, USA

06/2012: Contemporary methods for solving Diophantine equations - Banff International Research Station, Banff, Canada

07/2011: ACAGM Summer School - Katholieke Universiteit, Leuven, Belgium

06-07/2011: "Birch and Swinnerton-Dyer conjecture" summer school - Porto Conte Ricerche, Alghero, Italy