

Curriculum vitae

September 6, 2023

PERSONAL DATA

Name: Daniele

Surname: Vilone

Date of birth: 27/03/1978

Place of birth: Bergamo, Italy

Residence: Rome, Italy

Nationality: Italian

E-mail address: daniele.vilone@gmail.com

Website: <http://labss.istc.cnr.it/people/daniele-vilone>

METRICS (Computed by Google Scholar, September 6th, 2023)

Total citations: 1287.

H-index: 18.

i10-index: 23.

INSTRUCTION

2002-2005: Ph.D. studies in Physics at University "La Sapienza" of Rome, Italy, in collaboration with SMC (Statistical mechanics center). Thesis title: "Theoretical study of the Molecular Beam Epitaxy growth: the role of nucleation". Advisors: Prof. Luciano Pietronero, Dr. Claudio Castellano. Main topics: non-equilibrium statistical mechanics, crystal growth.

Specific courses attended: "Theory of Elasticity" (with Dr. Stefano Zapperi), "Computational methods for physics" (with Prof. Silvano Petrarca and Andrea Crisanti), "Quantum information" (with Prof. Carlo Cosmelli and Francesco De Martini), "Calculus of probabilities" (with Prof. Giorgio Parisi). Final exam successfully sat on January 13th, 2006.

2002: Degree in Physics at University "La Sapienza" of Rome, Italy. Final Marks 110/110. Thesis title: "Statistical-mechanical Approach to Axelrod's social evolution model". Advisors: Prof. Luciano Pietronero, Dr. Claudio Castellano. Main topics: non-equilibrium statistical mechanics, cellular automata.

1996: Secondary school certificate at the Liceo Classico Statale "Aristofane", Rome.

PRESENT OCCUPATION

Since December 2018: Permanent researcher at the Laboratory of Agent Based Social Simulation (LABSS), CNR, Rome.

Associated with GISC (Inter-disciplinary Group of Complex Systems), Universidad Carlos III de Madrid, Spain.

PREVIOUS OCCUPATIONS

December 2013/November 2018: Temporary researcher at the Laboratory of Agent Based Social Simulation (LABSS), CNR, Rome.

October 2012/November 2013: Post-doctoral fellowship at the Institute for Energetics and Interphases (IENI, now ICMATE), CNR, Milan, Italy.

October 2011/September 2012: Post-doctoral fellowship at the Institute for Cross-Disciplinary Physics and Complex Systems (IFISC), Palma de Mallorca, Spain.

October 2009/September 2011: Post-doctoral fellowship at the Department of Mathematics of Carlos III University of Madrid, Spain.

September/2008-September/2009: Associate member of the Center for the Study of Complex Systems (CSDC), Università degli studi di Firenze, Florence, Italy.

March/2007-September/2008: Position in ExxonMobil Europe, Prague, Czech Republic. Tasks: computer programming and software developing and maintenance.

March/2006-March/2007: Post-doc position at Jacobs University Bremen (former International University Bremen), Bremen, Germany.

PRESENT SCIENTIFIC ACTIVITY

My present research focuses on the statistical mechanics of complex systems from a highly interdisciplinary point of view. At the moment, I am studying the emergence of consensus in structured populations, the role of social norms in human behaviour, problems of equilibrium and dynamics of elastic membranes, and applications of mathematical physics to real-world problems. I am also referee for many international journals.

CONFERENCES AND SCHOOLS

Poster at the STATPHYS28 INTERNATIONAL CONFERENCE (title: “Opinion dynamics modeling by Continuous spin Ising-like approach”) - Tokyo (Japan), 7-11/08/2023.

Speaker at the CONFERENZA AISC 2022 (talk title: “Modelling the emergence of opinion misperception in online interactions”) - Rovereto (Italy), 15-17/12/2022.

Poster presented at the CSS CONFERENCE 2022 (title: “The effect of heterogenous distributions on the spread of infectious diseases”) - Palma de Mallorca (Spain), 17-21/10/2022.

Speaker at the CONFERENCE BEHAVE 2022 (talk title: “Modelling the emergence of opinion misperception in online interactions”) - Milan (Italy), 12-16/09/2022.

Poster presented at the SOCIAL SIMULATION CONFERENCE 2021 (title: “The effect of heterogenous distributions of health social norms in pandemics”) - Cracow (Poland), 20-24/09/2021.

Seminar titled “Epidemic spreading and heterogeneity: an ABM model”, held on 2/12/2020 at the Internal CNR-ISTC Workshop, Rome, December 2020.

Speaker at the XVII GISC WORKSHOP (talk title: “Statistical Mechanics, Phase Transitions and Human Cooperation”) - Madrid (Spain), 17/01/2020.

Speaker at the CONFERENZA AISC 2019 (talk title: “The evolution of lying in well-mixed populations”) - Rome (Italy), 11-13/12/2019.

Speaker at the STATPHYS27 INTERNATIONAL CONFERENCE (talk title: “Evidence that criticality can make human cooperative groups more resistant to invasions”) - Buenos Aires (Argentina), 8-12/07/2019.

Speaker at the ITAL-IA NATIONAL WORKSHOP ON ARTIFICIAL INTELLIGENCE (talk title: “Simulative-cognitive Approach to the Study of Hard Sciences”) - Rome (Italy), 18-19/03/2019.

Speaker at the CONFERENZA AISC 2018 (talk title: “Hierarchical invasion of cooperation in Complex Networks”) - Pavia (Italy), 17-19/12/2018.

Poster presented at the XXII CONGRESO DE FÍSICA ESTADÍSTICA (FISEs) (title: “Quantum approach to Opinion Dynamics”) - Madrid (Spain), 18-20/10/2018.

Talk at the SOCIAL SIMULATION CONFERENCE 2018 (title: “From Quantum Cognition to Quantum Opinion Dynamics”) - Stockholm (Sweden), 20-24/08/2018.

Speaker at the Conference BIFI18, (talk title: “Criticality as key-concept to understand Social Norms’ dynamics”) - Zaragoza (Spain), 6-8/02/2018.

Speaker at the Conference COMPLEX NETWORKS 2017 (talk title: “Criticality as key-concept to understand Social Norms’ dynamics in networks”) - Lyon (France), 29/11-1/12/2017.

Poster presented at the CROSSROADS IN COMPLEX SYSTEMS Conference (title: “Hierarchical invasion of cooperation in complex networks”) - Palma de Mallorca (Spain), 5-8/06/2017.

Speaker at the SOCIAL SIMULATION CONFERENCE 2016 (talk title: “Reducing individuals’ risk sensitiveness can promote positive and non-alarmist views about catastrophic events in an agent-based simulation”) - Rome (Italy), 20-23/09/2016.

Poster presented at the STATPHYS26 INTERNATIONAL CONFERENCE (title: “Mechanical stability of cellular blebs”) - Lyon (France), 18-22/07/2016.

Speaker at the COMPUTER SCIENCE - THE HUMAN FACTOR Workshop, (talk title: “Sociophysical Approach to Risk Assessment”) - Florence (Italy), 23/03/2016.

Speaker at the CONFERENZA AISC 2015 (talk title: “Modelling collective problem solving processes: a simulative approach”) - Genova (Italy), 10-12/12/2015.

Speaker at the Symposium “Risk perception and trust dynamics for managing natural disasters” during the CONFERENZA AISC 2015 - Genova (Italy), 10-12/12/2015.

Speaker at the INTERNATIONAL CONFERENCE ON COMPUTATIONAL SOCIAL SCIENCE - ICCSS 2015 (talk title: “Social imitation vs strategic choice in the networked Prisoner’s Dilemma”) - Helsinki (Finland), 8-11/06/2015.

Poster presented at the INTERNATIONAL CONFERENCE ON COMPUTATIONAL SOCIAL SCIENCE - ICCSS 2015 (title: “Revising opinions: A cognitive account of opinion dynamics”) - Helsinki (Finland), 8-11/06/2015.

Speaker at the CARVING SOCIETY WORKSHOP (talk title: “Opinion dynamics in social influence: a cognitive account”) - Rome (Italy), 01/12/2014.

Speaker at the CSS WORKSHOP, satellite of the EUROPEAN CONFERENCE ON COMPLEX SYTEMS (ECCS) 2014 (talk title: “Opinion dynamics in social influence: a cognitive account”) - Lucca (Italy), 24-25/09/2014.

Speaker at the CODYM WORKSHOP, satellite of the EUROPEAN CONFERENCE ON COMPLEX SYTEMS (ECCS) 2014 (talk title: “Enhancing cooperative behaviours in a Public Goods Game: the role of reputation on complex topologies”) - Lucca (Italy), 24/09/2014.

Poster presented at the XIX CONGRESO DE FÍSICA ESTADÍSTICA (FISES) (title: “Robustness of cooperative behaviours in reputation-based evolving populations ”) - Ourense (Spain), 2-4/04/2014.

Seminar titled “Complex Systems and Sociophysics: Modelizing Human Behaviour”, held on 4/09/2013 at the Laboratory of Agent Based Social Simulation, Rome, Italy.

Participation to the RECOGNITION DISSEMINATION WORKSHOP 2013 - Florence (Italy), 18/06/2013.

Poster presented at the XVIII CONGRESO DE FÍSICA ESTADÍSTICA (FISEs) (title: “On the irrationality of consensus in heterogeneous networks”) - Palma de Mallorca (Spain), 18-20/10/2012.

Speaker at the CODYM WORKSHOP, satellite of the EUROPEAN CONFERENCE ON COMPLEX SYSTEMS (ECCS) 2012, (talk title: “The role of short-cuts for the emergence of cooperation in random topologies”) - Brussels (Belgium), 5/09/2012.

Poster presented at the INTERNATIONAL WORKSHOP ON AGENT-BASED MODELS AND COMPLEX TECHNO-SOCIAL SYSTEMS (title: “Rational and irrational dynamics are both needed to reach consensus in random topologies”) - Zurich (Switzerland), 2-4/07/2012.

Speaker at the IX GISC WORKSHOP (talk title: “Effects of mixed dynamics in spin systems with conserved magnetization”) - Madrid (Spain), 03/02/2012.

Poster presented at the XVII CONGRESO DE FÍSICA ESTADÍSTICA (FISEs) (title: “Chaos and unpredictability in evolutionary dynamics in discrete time”) - Barcelona (Spain), 2-4/06/2011.

Seminar titled “Chaos and unpredictability in Game Theory”, held on 27/05/2011 at the Physics Department of the Universidad Nacional Autónoma de México, México City, México.

Speaker at the 75TH ANNUAL MEETING OF THE DPG AND DPG SPRING MEETING (talk title: “The role of short-cuts for the emergence of cooperation in random topologies”) - Dresden (Germany), 13-18/03/2011.

Poster presented at the STATPHYS24 INTERNATIONAL CONFERENCE (title: “Competition of updating dynamics in evolutionary games on networks: the prisoner’s dilemma case”) - Cairns (Australia), 19-23/07/2010.

Speaker at the IV BIFI INTERNATIONAL CONGRESS (talk title: “The Peace Mediator effect in small groups”) - Zaragoza (Spain), 3-6/02/2010.

Seminar titled “The emergence of bluff as a rational strategy in poker-like games”, held on 31/03/2009 at the Department of Mathematics, University Carlos III de Madrid, Leganes, Madrid (Spain).

Seminar titled “Game Theory, Population Dynamics, and Social Aggregation”, held on 18/12/2008 at the Department of Mathematics FUNDP, University of Namur, Namur (Belgium).

Seminar titled “Game Theory for Social Dynamics”, held in Florence’s University (Physics Department) - Florence (Italy), 3/04/2008 (grant by CSDC).

Participation to COMPLEX SYSTEMS SUMMER SCHOOL - Ambleside (UK), 20-29/08/2006.

Participation to X CONFERENCE ON STATISTICAL AND COMPLEX SYSTEMS PHYSICS - Parma (Italy), 29/06-1/07/2005.

Participation to XIV CONFERENCE ON CRYSTAL GROWTH - Grenoble (France), 9-13/08/2004.

Speaker at the IX CONFERENCE ON STATISTICAL AND COMPLEX SYSTEMS PHYSICS (talk title: “Solution of voter model dynamics on small-world networks”) - Parma (Italy), 22-24/06/2004.

TEACHING ACTIVITY

Lectures on General Physics for students of Pharmaceutical Chemistry, Sapienza Università di Roma, 2017-18.

Lectures on Sociophysics for the 2016 ESSA Summer School, Rome (Italy), September 2016.

Lectures of Networks and Social Media for students in Experimental Psychology at the International Telematic University UNINETTUNO, Rome, academic year 2015-16.

Lectures of Dynamical Game Theory for Ph.D. students in Complex Systems, University of Florence, 2014-15.

Lectures of Cálculo II (integral calculus in one and more dimensions) for Engineering at the University Carlos III de Madrid, 2010.

Lectures on Game Theory for the course of Statistical Mechanics of Prof. Franco Bagnoli at University of Florence (Department of Energetics), 2008.

Lectures on Mechanics for the course of Physics of Prof. Hildegard Meyer-Ortmanns at International University Bremen, 2006.

Lectures on Thermodynamics and Optics for the course of “General Physics” of Prof. Alfredo Di Nola, Sapienza Università di Roma, 2004-05.

LANGUAGES

Italian (native speaker), English (Trinity college examination Grade 7, passed with distinction), Spanish (Official DELE Diploma, level B2), Catalan (A1 level).

COMPUTING SKILLS

Working in Linux and Windows environment; writing with LaTeX, Word and PowerPoint.

Known programming languages: C and NetLogo.

ACHIEVEMENTS

Accredited as “Ayudante Doctor” (Ph.D. Assistant Professor) in the Spanish academic system since February 2011.

GRANTS: from 1997 to 2001, annual grant from ADISU (Azienda per il Diritto allo Studio Universitario) for academic merits.

INTERNATIONAL PROJECTS

Project **Humane AI Net** (European network of Human-Centered Artificial Intelligence), CNR (ISTC), Rome, Italy. H2020 Grant agreement No. 761758. Start date: 11/04/2019 (in progress).

Project **PROTON** (Modelling the PRocesses leading to Organised crime and TerrOrist Networks), CNR (ISTC), Rome, Italy. H2020 Grant agreement No. 699824. Start date: 01/10/2016 - End date: 30/09/2019.

Project **CIMPLEX** (Bringing CITizens, Models and Data together in Participatory, Interactive Social EXploratories), CNR (ISTC-IIT), Rome, Italy. Grant No. 641191. Coordinator: DFKI (Germany). Start date: 01/01/2015 - End date: 31/12/2017.

Project **SIZEEFFECTS**, CNR-IENI (now CNR-ICMATE), Milan, Italy. Grant No. 291002. Head researcher: Stefano Zapperi. Start date: 01/03/2012 - End date: 28/02/2018.

Project **FET-AWARENESS RECOGNITION**, CSDC - Florence University, Florence, Italy. Grant No. 257756. Head researchers: Roger M. Whitaker and Franco Bagnoli. Start date: 01/10/2011 - End date: 30/09/2014.

Project **FISICOS**, Instituto de Física Interdisciplinar y Sistemas Complejos (IFISC), Palma de Mallorca, Balearic Islands, Spain. Heads researchers: Maxi San Miguel and Raúl Toral.

Start date: 01/10/2007 - End date: 30/09/2012.

ITALIAN NATIONAL PROJECTS

Project **COBRA** (COoperation and BRAin-Synchrony: a multiscale and translatable approach), PRIN under the MUR National Recovery and Resilience Plan funded by the European Union NextGenerationEU. To be started soon.

Project **SERICS** (SEcurity and RIghts In the CyberSpace – PE00000014) under the MUR National Recovery and Resilience Plan funded by the European Union NextGenerationEU. Start date: January 1st, 2023 (in progress).

Project **CLARA** (Cloud plAtform and smart underground imaging for natural Risk Assessment), PON 2007– 2013: Smart Cities and Communities and Social Innovation; Asse e Obiettivo: Asse II - Azione Integrata per la Società dell'Informazione; Ambito: Sicurezza del territorio – SCN_00451. Head researcher: Rino Falcone (CNR).

Start Date: 01/02/2015 - End date: 31/12/2019.

Project **PRISMA**, PON 04a2 A, Programma Operativo Nazionale Ricerca e Competitività 2007-2013. Settore: Smart Cities and Communities and Social Innovation Asse e Obiettivo: Asse II - Azioni integrate per lo sviluppo sostenibile. Head researcher: Mario Paolucci (CNR).

Start date: 01/10/2012 - End date: 31/05/2015.

PUBLICATIONS

D. Vilone, E. Polizzi, **Modelling opinion misperception and the emergence of silence in online social system**, arXiv:2307.04475 [physics.soc-ph] (2023). Under review for PLoS ONE.

A. Taloni, D. Vilone, G. Ruta, **General theory for plane extensible elastica with arbitrary undeformed shape**, *Int. J. Eng. Sci.* **193**, 103941 (2023).

D. Vilone, G. Andrighetto, **The effect of heterogeneous distributions of preventive social norms on the spread of infectious disease**, arXiv:2203.14885 [physics.soc-ph] (2022).

D. Vilone, **“Noise and fluctuations can undermine the efficiency of Majority Rule in Group Evaluation problems”**, arXiv:2203.05277 [physics.soc-ph] (2022).

F. Giardini, D. Vilone, A. Sánchez, A. Antonioni, **“Gossip and competitive altruism support cooperation in a Public Good Game”**, *Philos. Trans. R. Soc. B* **376**, 20200303 (2021).

D. Vilone, J. Realpe-Gómez, G. Andrighetto, **“Evolutionary advantages of turning points in human cooperative behaviour”**, *PLoS ONE* **16(02)**, e0246278 (2021).

F. Giardini, D. Vilone, **“Opinion dynamics and collective risk perception: An ABM model of institutional and media communication about disasters”**, *JASSS* **24(1)**, 4 (2021).

V. Capraro, M. Perc, D. Vilone, **“Lying on networks: The role of structure and topology in promoting honesty”**, *Phys. Rev. E* **101**, 032305 (2020).

V. Capraro, M. Perc, D. Vilone, **“The evolution of lying in well-mixed populations”**, *J. R. Soc. Interface* **16**, 156 (2019).

A. Guazzini, F. Stefanelli, E. Imbimbo, D. Vilone, F. Bagnoli, Z. Levnajic, **“Humans best judge how much to cooperate when facing hard problems in large groups”**, *Sci. Rep.* **9**, 5497 (2019).

S. Felletti, P. Pagliuca, A. Sapienza, D. Vilone, **“On the use of agent-based simulation for cognitive science”**, C. Chesì & G. Piredda (eds.), *Proceedings of the 15th Conference of the Italian Association for Cognitive Sciences (AISC 2018)*. IUSS Pavia, 17-19 December 2018. ISBN: 9788890794384 (2018).

J. Realpe-Gómez, D. Vilone, G. Andrighetto, L. G. Nardin, J. A. Montoya, **“Learning Dynamics and Norm Psychology Supports Human Cooperation in a Large-Scale Prisoner’s Dilemma on Networks”**, *Games* **9**, 90 (2018).

D. Vilone, V. Capraro, J. J. Ramasco, **“Hierarchical invasion processes of cooperative behaviors on complex networks”**, *Journal of Physics Communications* **2**, 025019 (2018).

D. Vilone, G. Andrighetto, J. Realpe-Gómez, **“Criticality as Key-Concept to Understand Social Norms’ Dynamics in Networks”** in: *Complex Networks & Their Applications VI*. Editors: C. Cherifi *et al.*, *Studies in Computational Intelligence*, vol 689, Springer (2018).

A. Guazzini, A. Sarac, C. Donati, A. Nardi, D. Vilone, P. Meringolo, **“Participation and Privacy perception in virtual environments: the role of sense of community, culture and sex between Italian and Turkish”**, *Future Internet* **9**, 11 (2017).

M. Pereda, D. Vilone, **“Social pressure and environmental effects on networks: a path to cooperation”**, *Games* **8**, 7 (2017).

A. Guazzini, E. Guidi, C. Cecchini, M. Milani, D. Vilone, P. Meringolo, **“Self-presentation and emotional contagion on Facebook: new experimental measures of profiles’ emotional coherence”**, arXiv:1607.07243 [cs.SI] (2017).

V. Capraro, F. Giardini, D. Vilone, M. Paolucci, “**Partner selection supported by opaque reputation promotes cooperative behavior**”, *Judgm. Decis. Mak.* **11**, 6, 589 (2016).

F. Giardini, D. Vilone, “**Evolution of gossip-based indirect reciprocity on a bipartite network**”, *Sci. Rep.* **6**, 37931 (2016).

D. Vilone, F. Giardini, M. Paolucci, R. Conte, “**Reducing individuals’ risk sensitiveness can promote positive and non-alarmist views about catastrophic events in an agent-based simulation**”, accepted as a full paper for the Social Simulation Conference 2016, arXiv:1609.04566 [physics.soc-ph] (2016).

D. Vilone, T. Carletti, F. Bagnoli, A. Guazzini, “**The Peace Mediator Effect: Heterogeneous agents can foster consensus in continuous opinion models**”, *Phys. A* **462**, 84 (2016).

F. Giardini, A. Guazzini, M. Duradoni, M. Paolucci, L. Brigida, D. Vilone, F. Bagnoli, “**Reputational incentives for cooperation in a competitive game with adolescents: An experimental study**”, *Sistemi Intelligenti* **2-3**, 216 (2016).

D. Vilone, F. Giardini, M. Paolucci, “**Reputation-Based Partner Selection and Network Topology Support the Emergence of Cooperation in Groups**”, in *New Frontiers in the Study of Social Phenomena*, Chapter 6. Editor F. Cecconi, Springer. (2016)¹.

A. Guazzini, D. Vilone, C. Donati, A. Nardi, Z. Levnajić, “**Modeling crowdsourcing as collective problem solving**”, *Sci. Rep.* **5**, 16557 (2015).

F. Giardini, D. Vilone, R. Conte, “**Consensus Emerging from the Bottom-up: the Role of Cognitive Variables in Opinion Dynamics**”, *Front. Phys.* **3**, 00064 (2015).

¹A slightly different version is available at [arXiv:1410.6625v3](https://arxiv.org/abs/1410.6625v3) [physics.soc-ph].

D. Vilone, J. J. Ramasco, A. Sánchez, M. San Miguel, “**Social imitation vs strategic choice, or consensus vs cooperation in the networked Prisoner’s Dilemma**”, Phys. Rev. E **90**, 022810 (2014).

A. Guazzini, D. Vilone, “**Bluffing as a Rational Strategy in a Simple Poker-Like Game Model**”, J. Compl. Syst. 390454 (2013).

D. Vilone, J. J. Ramasco, A. Sánchez, M. San Miguel, “**Social and strategic imitation: the way to consensus**”, Sci. Rep. **2**, 686 (2012).

A. Guazzini, D. Vilone, F. Bagnoli, T. Carletti, R. Lauro Grotto, “**Cognitive network structure: an experimental study**”, Adv. in Compl. Syst. **15**, 6, 1250084 (2012).

D. Vilone, A. Robledo, A. Sánchez, “**Chaos and unpredictability in evolutionary dynamics in discrete time**”, Phys. Rev. Lett. **107**, 038101 (2011).

J. Gómez-Gardeñes, D. Vilone, A. Sánchez, “**Disentangling social and group heterogeneities: Public goods games on complex networks**”, Europhys. Lett. **95**, 68003 (2011).

D. Vilone, A. Sánchez, J. Gómez-Gardeñes, “**Random topologies and the emergence of cooperation: the role of short-cuts**”, J. of Stat. Mech., P04019 (2011).

J. Gómez-Gardeñes, M. Romance, R. Criado, D. Vilone, A. Sánchez, “**Evolutionary Games defined at the Network Mesoscale: The Public Goods game**”, Chaos **21**, 0016113 (2011).

D. Vilone, A. Guazzini, “**Social Aggregation as a Cooperative Game**”, Phys. A **390**, 2716 (2011).

A. Cardillo, J. Gómez-Gardeñes, D. Vilone, A. Sánchez, “**Competition of updating dynamics in evolutionary games on networks: the prisoner’s dilemma case**”, New J. Phys. **12**, 103034 (2010).

A. Guazzini, D. Vilone, “**The emergence of bluff in poker-like games**”. In a different version, this article is a chapter of the Ph.D. thesis of Andrea Guazzini: see at arXiv:0901.3365 [physics.soc-ph] (2009).

F. Radicchi, D. Vilone, H. Meyer-Ortmanns, “**Phase transition between synchronous and asynchronous updating algorithms**”, Journal of Stat. Phys. **129**, 3 (2007).

F. Radicchi, D. Vilone, S. Yoon, H. Meyer-Ortmanns, “**Social balance as a satisfiability problem of computer science**”, Phys. Rev. E **75**, 026106, (2007).

F. Radicchi, D. Vilone, H. Meyer-Ortmanns, “**Universality class of triad dynamics on a triangular lattice**”, Phys. Rev. E **75**, 021118, (2007).

D. Vilone, C. Castellano, P. Politi, “**Fluctuations and scaling in models for particle aggregation**”, Surf. Sci. **600**, 2392 (2006).

D. Vilone, C. Castellano, P. Politi, “**Breakdown of metastability step-flow growth induced by nucleation**”, Phys. Rev. B **72**, 245414 (2005).

D. Vilone, C. Castellano, P. Politi, “**Nucleation and step-edge barriers always destabilize step-flow growth of a vicinal surface**”, Surf. Sci. Lett. **588**, L227 (2005).

D. Vilone, C. Castellano, “**Solution of voter model dynamics on annealed small-world networks**”, Phys. Rev. E **69**, 016109 (2004).

C. Castellano, D. Vilone, A. Vespignani, “**Incomplete ordering of the voter model on small-world networks**”, Europhys. Lett. **63**, 153 (2003).

D. Vilone, A. Vespignani, C. Castellano, “**Ordering phase transition in the one-dimensional Axelrod model**”, Eur. Phys. J. B **30**, 399 (2002).