

VI INTERNATIONAL
CONGRESS ON
CLUSTER RESEARCH

RETHINKING CLUSTERS

*RC2023 is
respectfully balanced
for gender equality*



THE PARADOX OF SUSTAINABILITY
INNOVATION: LOCAL OR GLOBAL?

VNIVERSITAT
DE VALÈNCIA



UNIVERSITAT
POLITÀCNICA
DE VALÈNCIA



PID2021-128878NB-100

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IP: Prof. Dr. Hervas-Oliver, JL, project: "INDUSTRIA 4.0 Y MODOS DE
INNOVACION EN EMPRESAS Y CLUSTERS"

SEPTEMBER/2023

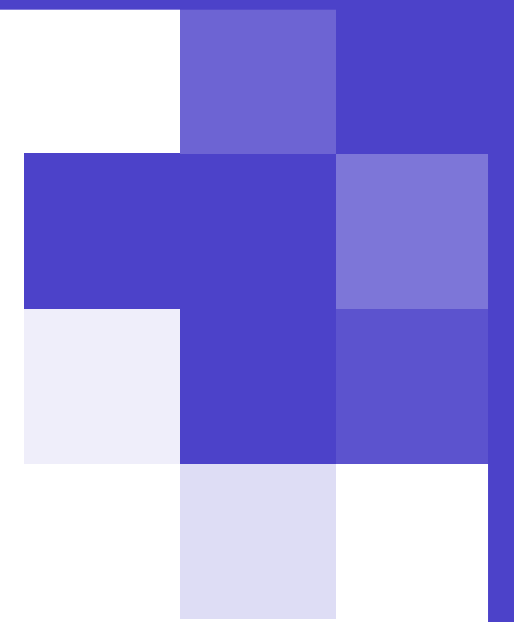
Universitat Politècnica de València

<https://www.rethinkingclusters.org/>

28th
29th

RETHINKING
CLUSTERS

We are
clusters



INDEX

RETHINKING
CLUSTERS

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GREETINGS FROM LOCAL ORGANIZERS

Welcome to the Universitat Politècnica de València and the Universitat de València!

For months, we have been looking forward to this Conference with enthusiasm and the willingness to show you our beloved institutions. We assume the idea that territories need to be managed in order to get a higher level of competitiveness. The idea of the territory, combined with the knowledge and understanding of firms' innovation and strategy is of utmost importance in this event. Our passion is to discuss about local/regional development, collaboration-based innovation, innovation without R&D, Industry 4.0, sustainability, clusters, industrial districts, SMEs, culture, artificial intelligence or multinationals, among many other. We also want to thank the members of the organizing committee, session chairs, reviewers and the Scientific Committee. Welcome all of you to Valencia!



Chair:
José Luis Hervas-Oliver
*Professor at Universitat Politècnica
de València*
Management Department



Chair:
Rafael Boix
*Professor at the Universitat de
València*
Department of Economic Structure.



CO-ORGANIZERS AND TOPICS

Co-organizers

Francesco Capone
Annalisa Caloffi
Luciana Lazzeretti
Silvia Rita Sedita

Local Organizing Committee

Jose-Luis Hervas-Oliver (Chair)
Rafael Boix (Chair)
Carles Boronat Moll
Sofia Estellés Miguel
Francisca Sempere Ripoll
Pau Rausell Köster
Raúl Abeledo Sanchís
Celia Melguizo Cháfer
Jordi Belda Sanjuan
Fernando Álvarez Teresa

Innovation is our focus.

We seek thought-provoking submissions from scholars in the social and scientific sciences, who are forging ahead with innovation to shift towards digitization and sustainability. We also expect traditional topics industrial districts/clusters, such as multinationals, social aspects or networks. Especially important in RC2023 is Industry 4.0. We want to discuss contributions that develop innovative approaches in concepts, theory, methods or analysis and have deep or broad implications to inform transitions for sustainable, innovative and digitized societies, and that use observational, experimental or theory-driven modes of inquiry, either at the micro- or meso-level unit of analysis for the better understanding of place-based innovation. We are territories, firms and place-based innovation!

SCIENTIFIC COMMITTEE

Andrés Rodríguez-Pose

Annalisa Caloffi

Blanca De Miguel Molina

Davide Parrilli

Dieter Kogler

Ekaterina Turkina

Eleonora Di Maria

Fernando Rubiera Morollón

Fiorenza Belussi

Francesc-Xavier Molina Morales

Francesco Capone

Francisca Sempere Ripoll

José Antonio Belso Martínez

José Luis Hervás-Oliver

Leïla Kebir

Luciana Lazzeretti

Marco Bettiol

Maria Angeles Montoro Sánchez

María De Miguel Molina

Marival Segarra-Oña

Mercedes Delgado

Michaela Tripl

Niccolò Innocenti

Pau Rausell Köster

Philip Cooke

Philippe Gugler

Rafael Boix Domènech

Raúl Abeledo Sanchís

Roberta Capello

Rosina Moreno Serrano

Rune Dahl Fitjar

Silvia Rita Sedita

Sofia Estellés Miquel

Stefania Oliva

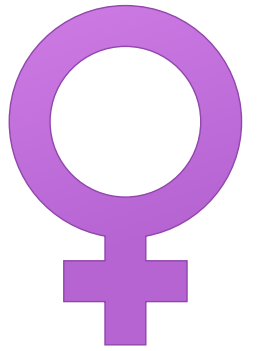
Tamane Ozeki

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We have the honor to present a great panel of Key Note scholars.

RC2023 is respectfully balanced for gender equality



Keynote Lecturer **Dr. Philip Cooke**

Bergen University College, Bergen, Norway

Philip Cooke holds the Chair at the Center for Innovation at Bergen University College, Norway. Between 1991 and 2014 he was University Research Professor in Regional Development, Director of the Center for Advanced Study at the University of Wales in Cardiff, and Professor at the Oxford Institute for Sustainable Development. Previously he was Adjunct Professor at the School of Development Studies of Aalborg University in Denmark, and the Laboratory for Economic, Political and Social Systems Research Studies of the University of Toulouse. He is Editor of of European Planning Studies.



Keynote Discussant **Dr. Luciana Lazzeretti**

University of Florence

Luciana Lazzeretti is Full Professor of Economics and Management at the University of Florence. She is a specialist on creative environments and innovation, and on the relationship between Artificial Intelligence and culture. His last book *The Rise of Algorithmic Society and the Strategic Role of Arts and Culture* has just been published by Edward Elgar.

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Thursday

09:00 - 09:30	Registration
09:30 - 11:00	Session 1.1 Session 1.2 Session 1.3
11:00 - 11:30	Coffee Break
11:30 - 13:00	Session 2.1 Session 2.2 Special Session Challenges for innovation Artcast4D Workshop
13:00 - 14:30	Lunch
14:30 - 16:00	Session 3.1 Session 3.2 Special Session Artcast4D
16:00 - 16:30	Coffee Break
16:30 - 18:00	Plenary
20:00	Drinks and Social Dinner at the Beach

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Friday

09:30 - 11:00	Session 4.1 Session 4.2 Session 4.3
11:00 - 11:30	Coffee Break
11:30 - 13:00	Session 5.1 Session 5.2 Special Session Industrial Districts
13:00 - 14:30	Lunch

PROGRAM
September 28th

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Thursday

09:00 - 09:30

Welcome and Opening

09:30 - 11:00

Session 1.1
ROOM 2.10: THE COMPETITIVENESS OF INDUSTRIAL DISTRICTS, CLUSTERS, REGIONS, AND ECOSYSTEMS (I)
Chair: Filippo Berti Mecocci

Potential formation of a hot spring industry cluster in Beppu, Japan: Learning from five European cities that participated in the 2018 World Hot Spring Summit

Takayuki Kubo; Akira Yamasaki

Bio-based industrial networks – Romanian best practice

Carmen Beatrice Pauna

Life cycle effects in new technologies – in which locations do German bioeconomy patents appear?

Sonja zu Jeddelloh; S. von Proff; T. Brenner

Multipliers, internal scale economies and local development

Filippo Berti Mecocci; Marco Bellandi

Session 1.2
ROOM 2.11: ARTIFICIAL INTELLIGENCE, BIG DATA, BLOCK-CHAIN, AND INDUSTRY 4.0 IN FIRMS AND PLACES
Chair: Francesco Capone

The Role of Clusters in Advancing Industry 4.0 Solutions: Insights from the Polish automotive context

Marta Götz; Marta Mackiewicz

Exploring Artificial Intelligence in Creative Regions: A Literature Review

Luciana Lazzeretti; Stefania Oliva; Niccolò Innocenti

Innovation in I4.0 and firms performance in Italy

Francesco Capone; Niccolò Innocenti; Leonardo Mazzoni; Luciana Lazzeretti

Session 1.3
ROOM 2.12: BLENDING STRATEGIC CONCEPTS AND TERRITORIES: HOW FIRMS ACTIVATE FIRM-LEVEL STRATEGIES IN PLACES
Chair: Annalisa Caloffi

The economic impact of port cluster: the case of Valencia port

Pablo Arnaiz Pérez; Juan Manuel Díez Orejas; Massimo Guagnini; Rosa Oliveros Navarro; Maravillas Sánchez-Barcaiztegui Álvarez; Livia Simongini; Juan Sosa Aparicio

Merging cluster organizations: pre-existing, process and sequence triggers

Mads Bruun Ingstrup; Nils Grashof

Mechanisms of Value Creation and Capture in Innovation Ecosystems: an analysis of Platform and Territorial Perspectives

Carlos Alberto Frantz dos Santos; Aurora Carneiro Zen

Government crowdsourcing across territorial levels

Annalisa Caloffi; Ana Colovic; Federica Rossi

11:00 - 11:30

Coffee Break

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Thursday

11:30- 13:00

Session 2.1
**ROOM 2.10: INNOVATION POLICYMAKERS:
RETHINKING THEIR ROLE**

Chair: Bjørn T. Asheim

Rethinking the role of corporate governance as a channel for innovation with an impact on the community

Carlos Estévez-Mendoza; Ángeles Montoro-Sánchez

When local goes global. Modes of innovation and diffusion in the micro and meso level of wine clusters

Caridad Maylín-Aguilar; Ángeles Montoro-Sánchez

Cluster management and policy learning: The value of strategic intelligence and multi-actor collaboration

Aitziber Elola; James R. Wilson

The role of clusters in addressing societal challenges in European regions

Silje Haus-Reve; Bjørn T. Asheim

Session 2.2
**ROOM 2.11: MODES OF INNOVATION AND
TERRITORIES: BLENDING MICRO- AND MESO-
LEVELS**

Chair: Dominika Kuberskab

Knowledge spillovers and science parks. Evidence from China

Chen Rui; Boris Lokshin; Pierre Mohnen

Risks and benefits of R&D: cases in the cities of Sejong and Daejeon

Song Pyo Kim

Intermediaries in university-industry collaboration (UIC): the role of cluster organizations in collaborative platforms

Lukáš Danko; Dominika Kuberskab; Drahomíra Pavelková; Małgorzata Kędzior-Laskowskab

Artcast4D open workshop
**ROOM 2.12: FUTURE BACKCASTING WORKSHOP
FOR IMMERSIVE EXPERIENCES**

Organisers/chairs: Elena Spadoni, Marco Denni, Martina Sciannamè

Special Session
**ROOM 2.13: CHALLENGES FOR INNOVATION
AND TERRITORIAL DEVELOPMENT IN SOUTH
AMERICA**

Chair: Sergio Palomeque

Proximity, relational resources and sustainable competitive advantage: insights for biotech startups

Diego de Vasconcelos Souza; Aurora Carneiro Zen; Ana Lúcia Tatsch

Environmental Challenges and Innovative Responses of Local Agri-food Systems: a Theoretical Approach and Research Agenda

Luis Collado; Pablo Galaso; María de las Mercedes Menéndez; Adrián Rodríguez Miranda

Skills relatedness and technological diversification
Sergio Palomeque

13:00 - 14:30

Lunch

RETHINKING
CLUSTERS

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Thursday

14:30 - 16:00

Session 3.1
ROOM 2.10: THE LOCAL/GLOBAL DIMENSION OF MULTIPLE INNOVATION NETWORKS (I)
Chair: Marco Bettiol

Internationalizing cluster organizations on market terms
Mads Bruun Ingstrup; Runolfur Smari Steinthorsson; Torben Munk Damgaard

Exploring the Nature of European Renewable Energy Clusters
Elisa Sabbadin; Ivan De Noni; Andrea Ganzaroli

Reflections on narrative context and diverging paths in cluster evolution
Ove Bjarnar; Rolv Petter Amdam; Lise Lillebrygfjeld Halse

How open innovation drives the intensity of use of Industry 4.0 technologies among Spanish firms
Marco Bettiol; Carles Boronat Moll; Eleonora Di Maria; José Luís Hervás Oliver

Session 3.2
ROOM 2.11: THE ROLE OF CULTURE AND REATIVITY IN EVOLUTIONARY TRAJECTORIES OF PLACES (I)
Chair: Luciana Lazzeretti

Playing with "Phygital" Culture
Andrea Ammirabile

Developing a model for research, development and innovation in a creative industries cluster
Justin Lewis; Marlen Komorovski; Mátê Miklós Fodor

How can public policies foster cross-sectoral innovation? Testing a model of Creative Hubs to promote creativity-based innovation within Textile industry in the MED region
Raúl Abeledo Sanchís

Museums' online reputation for places' reputation: the case of the Uffizi Galleries in Florence
Paula Beccherle; Luciana Lazzeretti; Stefania Oliva

Special Session
ROOM 2.12: SPECIAL SESSION ARTCAST4D
Chair: Alfredo Ronchi

Living Labs as an open innovation network: the ArtCast4D case study for immersive art environments
Andromachi Boikou; Efthimios Hamilos; Nikos Sarris; Spiros Nikolopoulos; and Ioannis

Defining the concept of Immersion and the keys to immersion
Elena Spadoni; Mauro Ceconello; Marco Denni; Alfredo Ronchi; Martina Scianamè; Davide Spallazzo

Impact first: Artcast4D media release and its impact on all digital channels
Christoph Glauser; Loris Schmid; Peter Kropf

A proposal for an integrated framework for immersive technologies
Guillem Bacete; Chuan Li; Pau Díaz Solano; Fernando Álvarez Teresa

16:00 - 16:30

Coffee Break

16:30 - 18:00

Plenary
ROOM 2.9+2.10: KEYNOTE LECTURE TAX HAVEN CLUSTERS: AGENTIC ASSEMBLAGES
Chairs: José Luis Hervás Oliver and Rafael Boix Domènech

Keynote Speaker: Professor Phil Cooke
Mohn Institute for Innovation and Regional Development, Western Norway
University of Applied Sciences, Bergen, Norway

Discussant: Professor Luciana Lazzeretti
Università degli Studi di Firenze

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Thursday

20:00

Social Dinner

La Ferradura 
Restaurante



PROGRAM
September 28th

29

Friday

09:30 - 11:00

Session 4.1
ROOM 2.10: THE COMPETITIVENESS OF INDUSTRIAL DISTRICTS, CLUSTERS, REGIONS, AND ECOSYSTEMS (II)
Chair: Niccolò Innocenti

It takes two to tango: an analysis of the effects of Entrepreneurial Ecosystems on Italian clusters
Massimo Riva; Federica Belfanti; Fernando G. Alberti

Microeconomics of Resilience: Cluster Organizations and the COVID-19 Pandemic
Dominika Kuberska

Internal resources, external environment or both? Exploring the critical determinants of innovative startup growth
Leonardo Mazzoni; Niccolò Innocenti

Session 4.2
ROOM 2.11: THE ROLE OF CULTURE AND CREATIVITY IN EVOLUTIONARY TRAJECTORIES OF PLACES (II)
Chair: Eva Coll-Martínez

Understanding innovation capabilities in the creative and cultural industries - Towards a new framework for managing innovativeness in places
Marlen Komorovski; Mátê Miklós Fodor; Justin Lewis

The role of cultural organisations in the evolutionary trajectories of places: The case of the Pistoia Museums Foundation
Stefania Oliva; Luciana Lazzeretti; Francesco Capone

The economic effect of the cultural and creative industries: an input-output analysis for 66 countries using inter-country input-output tables
Fernando Álvarez-Teresa; Rafael Boix-Domènech; Chuan Li

Creative Industries and Economic Complexity of Regions
Duygu Buyukyazici; Eva Coll-Martínez

Session 4.3
ROOM 2.12: THE LOCAL/GLOBAL DIMENSION OF MULTIPLE INNOVATION NETWORKS (I)
Chair: Jörg Thomä

Spatial heterogeneity in the effect of regional trust on innovation
Thore Sören Bischoff; Petrik Runst; Kilian Bizer

DUI drivers of innovation in lagging regions
Leonie Reher

Unlocking the Potential of Entrepreneurial Discovery in the Smart Specialization Strategy: An Exploration based on patent data at the Regional Level
Andrea Ganzaroli; Ivan De Noni; Elisa Sabbadin

Solving the puzzle? An innovation mode perspective on lagging regions
Jörg Thomä

11:00 - 11:30

Coffee Break

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Friday

11:30 - 13:00

Session 5.1
ROOM 2.10: THE COMPETITIVENESS OF INDUSTRIAL DISTRICTS, CLUSTERS, REGIONS, AND ECOSYSTEMS (II)
Chair: Niccolò Innocenti

The impact of fostering digital transformation in SMEs through a multi-actor collaboration process on the territorial innovation system: The case of 'PYME Digitala' in the province of Gipuzkoa
Aitziber Elola; Maddalen Alkorta

From local markets to global legitimacy: A bottom-up perspective on technological innovation system's dynamic
David Ayrapetyan; Nicolas Befort; Frans Hermans

From territorial to digital creative-based innovation ecosystems: how Florianópolis evolved from the magic island to the Silicon Island
Dinorá Floriani; Silvio de Vasconcellos; Beatrice Mayer

Dynamics of urban innovation ecosystems in developing countries: A comparative study
Aurora Carneiro Zen; Daniela Callegaro de Menezes; Carlos Alberto Frantz dos Santos; Everson dos Santos Spindler Bruno Anicet Bittencourt

Session 5.2
ROOM 2.11: THE ROLE OF CULTURE AND CREATIVITY IN EVOLUTIONARY TRAJECTORIES OF PLACES (II)
Chair: Eva Coll-Martínez

The emergence of place-based renewable energy clusters: a proposed framework for typification
Marcello Graziano; Pavel Soriano Hernandez; Christina Hoicka; Monika Mikhail

Skills for the circular economy: evidence from Emilia-Romagna, Italy
Roberto Antonietti; Davide Antonioli; Luca Cattani; Elisa Chioatto; Giulio Pedrini

The Circular Economy in the Context of Industrial Clusters: Cases of SMEs from the Tanning cluster of Arzignano, Italy
Marcos Ferasso; Fiorenza Belussi; Elisa Sabbadin

A place-based approach to the sustainability orientation of fashion firms: exploring the industrial district effect
Silvia Rita Sedita

Special Session
ROOM 2.12: MARSHALLIAN INDUSTRIAL DISTRICTS: CAPABILITIES, INNOVATION AND SUSTAINABILITY
Chair: José Luis Hervás Oliver

Testing cluster life cycle approaches on the evolution of the Trafalgar Garment District of Barcelona. From canonical to adaptive models
Rafael Vicente-Salar

Comparing innovation in the Marshallian industrial districts of Spain and Italy: a causal approach
Rafael Boix-Domenech; Francesco Capone; Vittorio Galletto; Fabio Sforzi

How do industrial district companies cope with sustainability? A focus on strategies and business relationships
Simone Guercini; Matteo Dominidiato; Matilde Milanesi

Diversification in industrial districts: is it about embedded regional or firm-level capabilities?
José Luís Hervás Oliver; Carles Boronat-Moll; Francisca Sempere-Ripoll

13:00 - 14:30

Lunch

VENUE: Universities



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Universitat Politècnica de València *Technological University of Valencia*

The Universitat Politècnica de València (Technological University of Valencia) is ranked in the first position of Spanish technological universities, leading the ranking of Spanish most innovative universities and being one of the top Spanish universities in the ARWU and QS rankings. The University, founded in 1971, albeit some schools like Industrial Engineers was founded more than a century ago, is listed in the ranking “The 150 under 50” (Times Higher Education) and the “Reuters Top 100” about the most innovative ones.

Discover more here:

<https://www.upv.es/estudios/grado/upv-rankings-en.html>



VENUE: Universities

VNIVERSITAT
ID VALÈNCIA

Universitat de València *University of Valencia*

The University of Valencia was founded in 1499 and is one of the oldest universities in Spain. It is a public university, oriented to teaching and research in almost all areas of knowledge. The University of Valencia has become one to the top five scientific centres in Spain thanks to its commitment to excellence and to the wide range of teaching and research activities offered in all areas of knowledge (basic sciences and engineering, health sciences, educational sciences, humanities and social sciences, economics and law). The Faculty of Economics, one of its centres of excellence, is located in front of the Polytechnic University of Valencia.



HISTORY

**We are
clusters**

The Rethinking-Clusters community grows every year, bringing new topics and approaches to discuss clusters and industrial districts. With the idea that the territory matters, we discuss thought-provoking research questions across different disciplines and literatures that intersect the topic of clusters and industrial districts, such as regional studies, innovation studies, economic geography or management, among others. We want to thank to all colleagues and friends that tirelessly contribute to the topic and are also part of the community: *Fiorenza Belussi, Fabio Sforzi, Davide Parrilli, Marco Bellandi, Roberto Grandinetti, Marco Bettiol, Elonora di Maria, Valentina De Marchi, Lisa De Propriis, Andrés Rodríguez-Pose, Philip Cooke, Bjorn Asheim, Jose Antonio Belso, Mercedes Delgado, Roberta Capello, Rune Dahl Fitjar, Elisa Giuliani, Roberta Rabelotti, Cristina Boari, Robert Hassink, Fornhal, Menzel, Christian Ostergaard, Trippel, Tödtling, etc.* Also, all researchers from Utrecht, Circle, LSE, Padova, Firenze, Valencia, Trento, Ca'Foscari, Bremen, Toulouse, Vienna, among many more universities, that contribute to the literature and to the community.

We all are clusters!

Dr. Jose-Luis Hervas-Oliver, co-Chair RC2023

2nd RC2019

Padova, 2019

Involving Universitat de València, University of Florence, University of Padova, Universitat Politècnica de València.

100 participants, 70 papers



2nd International Workshop on Rethinking Clusters 2019

*Valencia, 24th-25th March
2020 online*

**Place-based initiatives for
inclusive, innovative and
refelctive societies**

*Firenze, 20th-21st February
2021 online*

**Rethinking Culture
and Creativity in the
Technological Era**

*Osaka, 6h-7st September 2022
online*



The Rethinking-Clusters community grows every year, bringing new topics and approaches to discuss clusters and industrial districts. These are some of the outputs and publications developed from the Rethinking Cluster conferences:

Special issue in *Competitiveness Review*, 2022, 32 (5): [Industrial Districts: towards the future](#). Guest Editor: Jose Luis Hervas and Rafael Boix.

Special Issue in *Competitiveness Review*, 2021, 31(1) : [Industry 4.0 in firms, clusters and regions: the new digital imperative](#), Guest Editors: Jose-Luis Hervas-Oliver, Eleonora di Maria and Marco Bettiol.

Special Issue in *Competitiveness Review*, 2020, 30(4): [The Effect of Clusters on Innovation, Entrepreneurship and Global Value Chains](#). Guest Editors: Roberto Antonietti and Enrico Carlet.



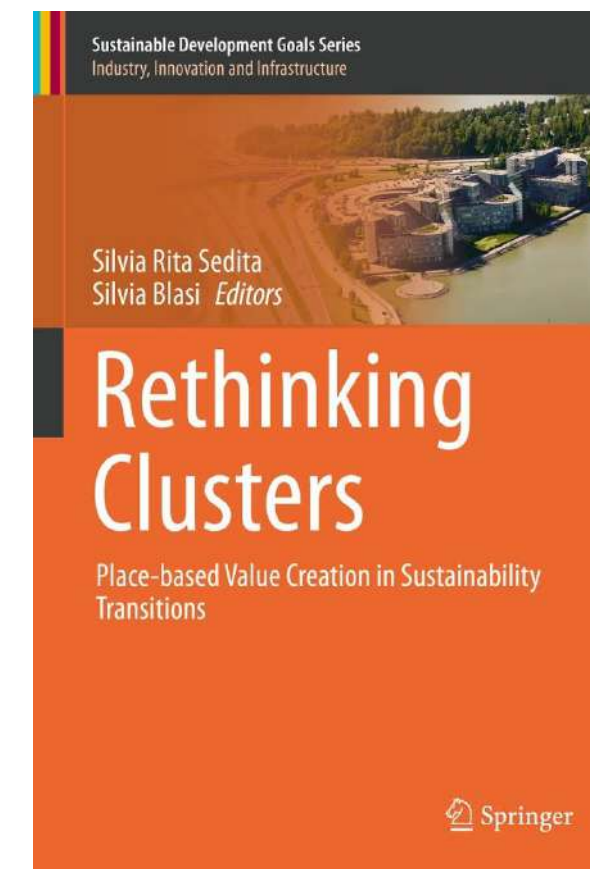
Special issue in *European Planning Studies*, 2023, 31 (7): [Artificial intelligence, big data, algorithms and industry 4.0 in firms and Clusters](#). Guest editor: Luciana Lazzeretti, Jose Luis Hervas, Rafael Boix and Niccolò Innocenti.

Special Issue in *European and Planning Studies*, 2022, 30 (9): [Rethinking culture and creativity in the digital transformation](#). Guest editor: Luciana Lazzeretti, Stefania Oliva, Niccolò Innocenti & Francesco Capone.

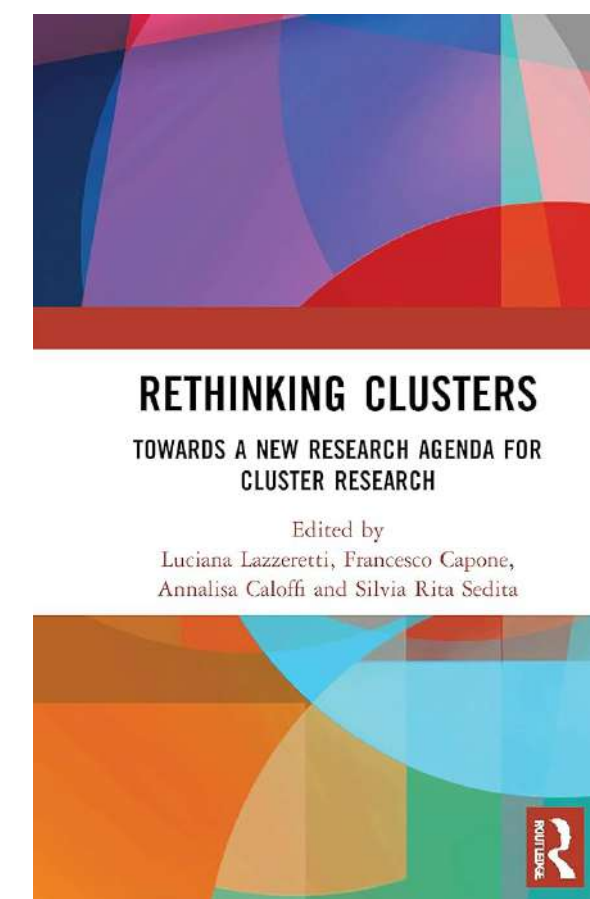
Special Issue in *European Planning Studies*, 2019, 27 (10): [Rethinking clusters. Critical Issues and new trajectories of cluster research](#). Guest editors: Luciana Lazzeretti, Francesco Capone, Annalisa Caloffi and Silvia Rita Sedita.



Special Issue in *Industry and Innovation*, 2021, 28 (7): [Rethinking the role of local knowledge networks in territorial innovation models](#). Guest Editors: Luciana Lazzeretti, Francesco Capone, Tom Broekel, Robert Hassink.



Sedita S. R. and Blasi S. (2021) (eds.) [Rethinking Clusters: Place-based value creation in sustainability transitions](#), Cham: Springer.



Lazzeretti L. Capone F., Caloffi A., Sedita S., (eds) (2020), [Rethinking clusters. Critical issues and new trajectories of cluster research](#), Routledge.

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IP: Prof. Dr. Hervas-Oliver, JL, project:
“INDUSTRIA 4.0 Y MODOS DE INNOVACION EN EMPRESAS Y CLUSTERS”

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