







INTERNATIONAL ACADEMIC CONFERENCE

# FORESIGHT AND SCIENCE, TECHNOLOGY AND INNOVATION POLICY

OCTOBER 15-26, 2021

# NATIONAL RESEARCH UNIVERSITY HIGHER SCHOOL OF ECONOMICS MOSCOW, RUSSIA

# PROGRAMME

(MOSCOW TIME IS INDICATED)

FORMAT: ONLINE

WORKING LANGUAGES: ENGLISH & RUSSIAN (WITH SIMULTANEOUS TRANSLATION)

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# Science, Technology and Innovation Policy

#### October 15, 2021 10:15-12:10

Session 1: Digitalisation of Society: New Technologies as Drivers of Social Transformation Chair: Ekaterina Streltsova, HSE University, Russia

10:20	Liliya Pankratova
	St.Petersburg University, Russia
	Digital Transformation of Consumer Society: Trends and Risks
10:40	Denis Strebkov, Andrey Shevchuk
	HSE University, Russia
	Remote Work in Russia: Trends and Perspectives of the Market
11:00	Valentina Polyakova
	HSE University, Russia
	Driverless Cars: Between Public Trust and Anxiety
11:20	Ekaterina Taran
	HSE University, Russia
	Elderly Population and the Digital Divide: Problems and Perspectives
11:40	Ivan Yudin, Liliya Kuzina
	HSE University, Russia
	Digital Practices of Russian Population in the Post-Pandemic Period: a Rebound Effect?
12:00	Discussion and Wrap-up
12:10	Coffee break

#### October 15, 2021 15:00–17:40

International Workshop: Global Value Chains and Regional Systems of Innovation: Towards a Critical Juncture?

Chair: Dirk Meissner, HSE University, Russia

NATIONAL RESEARCH		Institute for International Science & Technology Policy The george washington University	Utrecht University
15:00	Bruno Fischer		
	University of Camp	oinas, Brazil	
	Opening / introduct	tion	
15:05	Keynote Speech		
	Carlo Pietrobelli		

	Roma Tre University, Italy; United Nations University UNU-MERIT, Maastricht, The Netherlands
	Antonio Vezzani
	Roma Tre University, Italy
	Deepening or Delinking? Innovative Capacity and Global Value Chain Participation in the IT Industry
15:30	Jiali Liu
	Institutes of Science and Development, Chinese Academy of Sciences, China
	Embedding in Global Value Chains and Local Ecosystems by Latecomers: Evidence from China's Integrated Circuit Design Firms
	Discussant: Ron Boschma
	Utrecht University, the Netherlands
16:00	Shikha Gupta
	Faculty of Management Studies, University of Delhi, India
	Defining Research Agenda: Scientometric Analysis of Three Decades of Global Value Chains Research
	Discussant: Dirk Meissner
	HSE University, Russia
16:30	Zhuqing Mao
	University of Johannesburg College of Business and Economics, Auckland Park, Republic of South Africa
	Global Value Chains and Productivity Upgrading: a Sectoral Level Non-linear Approach
	Discussant: Nicholas Vonortas
	George Washington University, USA; HSE University, Russia
17:00	Ana Lucia Figueiredo Facin
	Universidade Estadual Paulista Julio de Mesquita Filho, Brazil
	Uncertainty Management in Global Innovation Ecosystems
	Discussant: Bruno Fischer
	University of Campinas, Brazil
17:30	Concluding remarks
	Nicholas Vonortas
	George Washington University, USA; HSE University, Russia
	Ron Boschma
	Utrecht University, the Netherlands
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# Foresight for STI Policy Making under Growing Complexity and Uncertainty

	October 18, 2021 12:00–13:35
Session 2: Fo	oresight: International Dimension
Chair: Mikha	il Goland, HSE University, Russia
12:05	Yutaro Kurogi
	Center for S&T Foresight and Indicators, National Institute of Science and Technology Policy, Japan
	Prospects for Science and Technology in the Post-COVID-19 Era
12:25	Rafael Popper
	Łukasiewicz Research Network, Poland; University of Manchester, UK; University of Turku, Finland
	Foresight and Internationalisation as Key Drivers of Science and Innovation: the Case of the Łukasiewicz Research Network in Poland
12:45	Alyona Nefedova
	HSE University, Russia
	International Mobility and Productivity of Young Researchers: What Statistics, Bibliometrics and Researchers Themselves Tell?
13:05	Yanuar Nugroho
	Centre for Innovation Policy and Governance, Indonesia
	Envisioning Knowledge & Innovation Ecosystem in Indonesia
13:25	Discussion and Wrap-up
13:35	Coffee break

#### October 18, 2021 13:45-15:40

#### Special Workshop: Science and Technology Foresight in BRICS Countries

**Co-Chairs: Irina Kuklina**, Secretariat of the Russian Council for Science, Technology and Innovation Cooperation of BRICS, International Centre for Innovations in Science, Technology and Education, Russia; **Alexander Sokolov**, HSE University, Russia



13:45	Irina Kuklina
	Secretariat of the Russian Council for Science, Technology and Innovation Cooperation of BRICS, International Centre for Innovations in Science, Technology and Education, Russia
	Opening Remarks
13:50	Gautam Goswami, Jancy Ayyaswamy
	Technology Information, Forecasting and Assessment Council, Department of Science and Technology, India
	Foresight Driven Policy and Decision Making System in India - an Insight
14:10	Yuan Like
	Chinese Academy of Science and Technology for Development, China
	National Technology Foresight System in China: Current Status and Future Challenges
14:30	Mlungisi Cele
	National Advisory Council on Innovation, Republic of South Africa
	From Foresight Exercise to Policy: Possible Impacts and Opportunities
14:50	Konstantin Vishnevskiy, Sofya Privorotskaya
	HSE University, Russia
	Digital Technologies Today and Tomorrow: Results of Semantic Analysis of Big Data
15:10	Marcio de Miranda Santos
	Center for Strategic Studies and Management, Brazil
	The Brazilian S&T Current Landscape: Main Trends and Thematic Characteristics
15:30	Discussion and Wrap-up

## October 19, 2021 12:00–13:35

## Session 3: Foresight Theory and Practices

Chair: Ted Fuller, University of Lincoln, UK

12:05	Seema Gail Parkash
	Centre for Strategic Futures, Singapore
	The Art of Creative Communication to Maximise Foresight Impact
12:25	Effie Amanatidou
	University of Manchester, UK
	Foresight for Responsible Transform-ability
12:45	Konstantin Vishnevsky, Anna Grebenyuk, Alexander Sokolov, Yulia Turovets HSE University, Russia

	Identification of S&T Frontiers: Big Data Analysis
13:05	Guillermo Velasco
	Polytechnic University of Madrid, Spain
	Reposition, Representation, Resolution: Three Influencing Factors on Foresight- Based Advising Processes
13:25	Discussion and Wrap-up
13:35	Coffee break

#### October 19, 2021 13:45–15:20

Session 4: Foresight and Human Capital

Chair: Yulia Milshina, HSE University, Russia

13:50	Anna Grebenyuk
	HSE University, Russia
	Global Trends and Human Capital: First Results of a Delphi Study
14:10	Jose Cordeiro
	The Millennium Project, USA
	The Future of Longevity: Mortality, Amortality and Immortality
14:30	Ibon Zugasti
	The Millennium Project, Spain
	Future of Work in a Post Covid Scenario
14:50	Discussion and Wrap-up
15:20	Coffee break

# October 19, 2021 15:30–18:00

Session 5: Science and Technology Responses for Green Recovery

Chair: Liliana Proskuryakova, HSE University, Russia

15:35	Asif Muhammad
	Glasgow Caledonian University, the UK
	Energy Transition: Dynamics, Prospects and Challenges
15:55	Ilya Stepanov
	HSE University, Russia
	Risks & Opportunities for Russia under Global Low-carbon Transformation
16:15	Stefan Vögele, Inga Wittenberg, Hawal Shamon, Lisa Broska, Wilhelm Kuckshinrichs
	Institute of Energy and Climate Research - Systems Analysis and Technology Evaluation, Research Centre Juelich, Germany

	On the Future(s) of Energy Communities in the German Energy Transition
16:35	Andrey Kulakov
	Inter RAO — Engineering, Russia
	Scenarios of Russia's Response to Energy Transition Challenges
16:55	Vincenzo Bianco
	University of Genoa, Italy
	Energy Efficiency Interventions in EU Residential Sector as a Driver for the Green Recovery. A Comparative Analysis of Germany, Italy and Spain
17:15	Brian Vad Mathiesen
	Aalborg University, Denmark
	Smart Energy Systems and 70% Reduction of Green House Gas Emissions by 2030
17:35	Discussion and Wrap-up

# October 20, 2021 12:00-14:30

#### Session 6: Big Data for Evidence-based Foresight and STI Policy Making

Chair: Ozcan Saritas, HSE University, Russia

12:05	Masaru Yarime
	The Hong Kong University of Science and Technology, China
	Governing Data-Driven Innovation for Sustainability: Implications for Foresight and STI Policy
12:25	Sercan Ozcan
	University of Portsmouth, UK
	Social Media Intelligence for Innovation and Product Development
12:45	Ilya Kuzminov
	HSE University, Russia
	Applied Use of Big Data in Strategic Analytics: A Retrospective of Completed Cases
13:05	Olga Maksimenkova
	HSE University, Russia
	Towards Interactive Big Text Mining Visualization as a Golden Standard in the Next Generation of Business Intelligence
13:25	Alberto Moro
	Joint Research Centre, European Commission
	The Use of Text Mining for Technology Foresight
13:45	Ozcan Saritas
	HSE University, Russia
	Brainstorming: Future Prospects of Big Data: What is Next for Foresight and STI

	Policy Making
14:05	Discussion and Wrap-up
14:30	Coffee break

#### October 20, 2021 14:40-15:45

**Session 7: Innovation Strategy** 

Chair: Mikhail Gershman, HSE University, Russia

14:45	Nicholas Vonortas		
	George Washington University, USA; HSE University, Russia		
	U.S. Innovation Strategy: Continuity and Disruption in National Policy		
15:30	Discussion and Wrap-up		

#### October 21, 2021 12:00-13:55

#### Session 8: Planning Future Scenarios under Complexity and Uncertainty

Chair: Yury Dranev, HSE University, Russia

12:05	Luke Georghiou
	University of Manchester, UK
	Foresight on the Role of Universities after the Pandemic
12:25	Diana Managalagiu
	Environmental Change Institute, University of Oxford, UK
	Integrated Foresight Approaches for Transformative Environmental Policy
12:45	Sami Mahroum
	Solvay Brussels School of Economics and Management, Belgium
	Using Principal-Agent Frameworks to Construct Future Scenarios: Automation and the Future of Jobs as an Example
13:05	John A. Sweeney
	Westminster International University in Tashkent, Uzbekistan
	Superfluid Strategizing: Approaching Futures through the Lens of Chaos Theory
13:25	Discussion and Wrap-up
13:55	Coffee break

#### October 21, 2021 14:15–16:40

Session 9: Pandemonics

Chair: Ozcan Saritas, HSE University, Russia

14:20 Ian Miles

	HSE University, Russia; University of Manchester, UK
	Pandemonium: What the COVID19 Crisis Can Teach Us about Foresight?
14:35	Rushdi Abdul Rahim
	Malaysian Industry Government Group for High Technology; Malaysian Foresight Institute, Malaysia
	Responding to Post Pandemic Futures
14:50	Kerstin Cuhls
	Fraunhofer Institute for Systems and Innovation Research, Germany
	Five European Possible Futures 2040 - PostCovid-19 Scenarios for the European Commission
15:05	Joe Ravetz
	University of Manchester, UK
	Foresight Goes Viral: Working with Collective Foresight Intelligence
15:20	Discussion
15:30	Coffee break
15:40	Interactive brainstorming in the Laboratory of Collective Intelligence
16:30	Discussion and Wrap-up

#### October 22, 2021 12:00–13:30

Session 10: New Frontiers of Open Innovation

Chair: Dirk Meissner, HSE University, Russia

12:05	Vitaliy Roud, Valeria Vlasova HSE University, Russia
	Innovation Culture in the Age of Open Innovation
12:25	Marina Dabich
	University of Zagreb, Croatia, Nottingham Trent University, UK
	The Limits of Open Innovation
12:45	David Sarpong
	Brunel University, UK
	Public Research in Open Innovation
13:05	Discussion and Wrap-up
13:30	Coffee break

## October 22, 2021 14:10-15:45

#### **Session 11: Innovation in Finance**

14:15	Thomas Thurner, Veronika Belousova, Nikolay Chichkanov, Zhaklin KrayushkinaHSE University, RussiaThe Reverse Product Innovation Cycle Revisited – How Banks are Expanding Their Service Innovation Activities to Facilitating Societal Resilience During Covid-19
14:35	Larry Cao
	CFA Institute, USA
	T-Shaped Teams: Organizing to Adopt AI and Big Data at Investment Firms
14:55	Gael Imad'Eddine
	University of Lille, France;
	Antti Miihkinen
	Aalto University, Finland;
	Jan-Oliver Strych
	Karlsruhe Institute of Technology, Germany
	Internal Governance of Firms by Promotion-Based Incentives: Empirical Evidence from Mergers and Acquisitions
15:15	Yury Dranev, Elena Ochirova
	HSE University, Russia;
	Rainer Harms
	University of Twente, The Netherland, HSE University, Russia
	Efficiency of Technology M&A: Implications for Open Innovation
15:35	Discussion and Wrap-up
15:45	Coffee break

Chair: Ian Miles, HSE University, Russia; University of Manchester, UK

#### October 22, 2021 16:00–17:30

Session 12: Global Innovation Index 2021

Chair: Leonid Gokhberg, HSE University, Russia

16:05	Leonid Gokhberg
	HSE University, Russia
	Opening Remarks
16:15	Sacha Wunsch-Vincent
	World Intellectual Property Organization
	Global Innovation Index 2021 (GII) Presentation
16:15	Discussion
	Issues for discussion:
	• What national innovation system attributes and strong sides are the most

• What national innovation system attributes and strong sides are the most

	important for nations' success in innovation?
	• Is it possible to succeed along all dimensions of GII simultaneously? What does an example of the leading countries tell us?
	<ul> <li>Does the GII reflect national specificities of countries? And is it even necessary?</li> </ul>
	What a role can GII play for policy makers?
	Participants:
	Soumitra Dutta
	Portulans Institute; SC Johnson College of Business, Cornell University, USA
	Moacir de Miranda Oliveira Junior
	University of San Paulo, Brazil
	Veneta Andonova
	University of Los Andes, Colombia
	José Ernesto Amorós
	EGADE Business School, Mexico
	Fernando Moya
	EGADE Business School, Mexico
	Irina Dezhina
	Skolkovo Institute of Science and Technology; HSE University, Russia
	Valeriya Vlasova
	HSE University, Russia
	Vitaliy Roud
	HSE University, Russia
17:25	Leonid Gokhberg
	HSE University, Russia
	Concluding Remarks

# October 25, 2021 12:00-13:35

Session 13: «Designing and Managing Clusters for Sustainability»: Presentation of a Forthcoming Book

Chair: Evgeniya Lupova-Henry, University of Neuchâtel, Switzerland

12:05	Héloïse Berkowitz, Martine Gadille
	Aix-Marseille University, France
	Meta-organizing Clusters as Agents of Transformative Change through 'Responsible Actorhood'
12:25	Francesco Cappellano
	University of Eastern Finland, Finland
	Are North American Clusters Transitioning to Clean Technologies?

12:45	Evgeniy Kutsenko
	HSE University, Russia
	Moscow Innovation Cluster: Key Concept Features and Coronavirus Stress Test
13:05	Assia Viachka
	Stockholm School of Economics, Sweden
	Clean Technology Clusters: Meta-Organising Firms for Sustainability
13:25	Discussion and Wrap-up
13:35	Coffee break

### October 25, 2021 13:45–15:40 Session 14: Competition of World Cities for Innovation Stars

Chair: Pavel Rudnik, HSE University, Russia

13:50	Evgeniy Kutsenko
	HSE University, Russia
	Innovative Moscow: Strategic Challenges and Tactical Responses
14:10	Philipp Grosskurth
	World Intellectual Property Organization
	Global Innovation Hotspots: Local Capabilities and Global Networks
14:30	Bruno Fischer
	University of Campinas, Brazil;
	Alexander Skorobogatov
	HSE University, Russia;
	Kirill Tyurchev
	HSE University, Russia
	Where do Unicorns Live? Research on Global Innovation Centers
14:50	Joe Ravetz
	University of Manchester, UK
	From Universities to Multi-versities: Alternative Views on Innovation Eco-systems in a Disruptive World
15:10	Vladislav Rutskiy
	HSE University, Russia
	Success Factors of Fast-Growing Gazelle Companies in the Context of the Challenges of the Russian Economy and Large Cities
15:30	Discussion and Wrap-up
15:40	Coffee break

	October 25, 2021 15:50–17:25
Session 1	5: Future of Science and Education
Chair: Ale	xander Sokolov, HSE University, Russia
15:55	Matthias Weber
	AIT, Austria;
	Kerstin Cuhls
	Fraunhofer Institute for Systems and Innovation Research, Germany;
	Attila Havas
	Institute of Economics, Hungary;
	Ahti Salo
	Aalto University, Finland
	Embedded and Performative Foresight for STI Policies
16:15	Philip Shapira, Mabel Sanchez Barrioluengo
	University of Manchester, UK
	The Post Pandemic University
16:35	Riel Miller
	UNESCO
	Futures Literacy and Complexity: Integrating Uncertainty as a Condition not a Variable
16:55	Jonathan Calof
	University of Ottawa, Canada; HSE University, Russia
	Anticipatory System Model: Canadian UNESCO Chair
17:15	Discussion and Wrap-up

#### October 26, 2021 12:00–13:35

Session 16: Strategic Trends and Anti-crisis Response in Regional Specialization Industries Chair: Evgeniy Kutsenko, HSE University, Russia; Andrey Nikiforov, Ministry of Economic Development of the Russia Federation, Russia

12:05	Ron Boschma <i>Utrecht University, the Netherlands</i> The Role of Scientific Capabilities for Regional Diversification
12:25	<b>Kirill Tyurchev</b> <i>HSE University, Russia</i> Does Complementarity Matter for the Emergence of New Specialization Industries in Russia?
12:45	Vasily Abashkin HSE University, Russia

	Entrepreneurial Activity in the Regional Specialization Industries During the COVID- Crisis
13:05	Yuri Simachev
	HSE University, Russia
	Russian Companies' Response to the Covid-19 Crisis and Industrial Policy Challenges
13:25	Discussion and Wrap-up
13:35	Coffee break

#### October 26, 2021 13:45–15:20

Session 17: Cooperation in Innovation: Practices of the Large Companies

Chair: Sergey Artemov, HSE University, Russia

13:50	Alexander Kashirin
	Rostech, Russia
	New Tools of Cooperative Interaction in the Processes of Creating Innovative Products
14:05	Natalia Ilina
	Rosatom, Russia
	Mechanisms for Expanding the Network of Partnerships Based on the Principle of 'One Window' in the State Corporation 'Rosatom'
14:20	Andrey Tulupov
	Russian Railways, Russia
	Shaping of Long-term Goal-setting for Coordination of the Innovation Ecosystem
14:35	Nikita Zhuchkov
	Russian Post, Russia
	Development of Interaction with Third-party Organizations Based on the Principles of 'Open Innovation' — Experience of Russian Post
14:50	Alexey Filimonov
	Innovation and R&D Directors Club (iR&Dclub), Russia
	Methodological Recommendations for State-owned Companies on Managing Requests for External Innovations
15:05	Pavel Rudnik, Konstantin Vishnevkiy
	HSE University, Russia
	Models of Cooperation with Large Companies in the High-tech Field
15:15	Discussion and Wrap-up