Thematic Programs · Junior Research Programs

		Thematic	Junior Resear	Junior Research Programs		
2013	Particle Physics and Cosmology after the Discovery of the Higgs boson					
2014 <	Challenges for Big Data in our Society Statistical Analysis of Large Scale, High Dimensional Data for Socio-Economic Problems	A Health Informatics Infrastructure for a New Era	Recovery from the Great East Japan Earthquake and Tsunami Future Strategies for Disaster Risk Reduction			
2015 <	Frontiers of Brain Science	Fundamental Problems in Quantum Physics: Strings, Black Holes and Quantum Information	Spintronics: from Mathematics to Devices	The Effects of Technological Changes on Social Mobility and Income Distribution		
2016 <	Modern Interactions between Algebra, Geometry and Physics	Earth and Planetary Dynamics	Comprehensive Research on Materials, Systems and Energy for a Sustainable Future of the Earth	The 21st Century Hasekura Project: Japanese Studies as the Interface of a New Knowledge	Interdisciplinary Approach to the Protection of Human Rights: Building Integrated Networks between Academic, State and Societal Actors	
2017 <	Aging Science: from Molecules to Society	Nonlinear Partial Differential Equations for Future Applications	New Horizons in Food Science via Agricultural Immunology		Nanostructured Magnetic Materials: Challenges for Next-Generation Materials	Political and Social Dynamics of Crisis and Innovation in Japan, Asia and the World
2018 <	Geologic Stabilization and Human Adaptations in North Asia	Tohoku Universal Acoustical Communication Month 2018	Frontier of Chemical Communication	String-Math 2018		
2019	Plant Stem Cells: Source of Plant Vitality	Creating a New Frontier through the Synergy of Quasicrystals and Strongly Correlated Electron Systems	Cancer - from Biology to Acceptance		The Future of Materials Engineering - Dramatic Innovation for the Next 100 Years	
2020 <	Designing the Human-Centric IoT Society -Cooperative Industry- Academic Strategies for Creative Future Connection-	Environmental and Financial Risks in Market-oriented Societies	Constructing healthy society: the road from integrated biobank to the real world		Dawn of Gravitational- wave Cosmology and Theory of Gravity	
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Thematic Programs · Junior Research Programs · Future Society Design Programs

2020	Thematic programs	Junior Research Programs		Future Society Design Programs	
2021	Environmental and Financial Risks in Market-oriented Societies Constructing healthy society: the road from integrated biobank to the real world	Dawn of Gravitational-wave Cosmology and Theory of Gravity			
	POST 2011 Tohoku triple disaster: Lessons and their global application on multi-hazards and cascading disasters		Establishment of Lightning Resistant Metal Coating Technology on CFRP	Creating Diversified and Inclusive Cities Through Boccia in Public Spaces	
2022	Evolving and Emerging Redox Biology and Bioenergetics for Medicine and Human Health	Human Sociality: Comparative Studies of Social Evolution and Historical Dynamics	Assisted by Kinetic, Physical and Chemical Energies Contributions of XR Technology to Education and Society: The Metaverse and International		
2023 <	Integrated Understanding of Marine Environment and Marine Ecosystems	Tohoku Initiative for NeuroTech Innovations	Collaborative Creation Environmental Stress Response and Survival Strategy of Human Being	Sustainable Structural Integrity for Energy Infrastructure	How can the Digitalization of Japan's Democracy be Promoted?
2024	Designing Foods for the Future of Communication	Universality of Strongly Correlated Few-body and Many- body Quantum Systems	Positioning of Nuclear Energy in Sustainable Energy Strategies - Redefining from a Risk Management Perspective	Urban Transition with Wood for Enhanced Resilience of Cities and Forests	Tohoku Transition to Future



Thematic Programs · Junior Research Programs · Future Society Design Programs

	Thematic programs	Junior Research Programs	Future Society Design Programs	
2025	Uncovering Causality in our Complex World Promotion of personalized	Molecular Machines for Multi-scale Applications The Theory of Periodic Tangles and Their Interdisciplinary Applications	Supersulfides Biology for Life and Social Innovation	
2026	Towards New Scientific Horizons with Synchrotron Radiation	X-ray Spectroscopy for Future Nano Materials Science Novel Approach to Design of Energy Storage Materials		
2027				
2028				
2029				

