

# Major Research Areas

## Theology, philosophy, biblical studies and medieval art

Research Topic	Principal Investigators	Faculty
<a href="#">Theology, Philosophy, and Reflection of Art as Ways of Interpreting the Reality</a>	<a href="#">Vojtěch Novotný</a> <a href="#">David Vopřada</a>	<a href="#">Catholic Theological Faculty</a>
<a href="#">History and History of Arts</a>	<a href="#">Petr Kubín</a> <a href="#">Vít Vlnas</a>	<a href="#">Catholic Theological Faculty</a>
<a href="#">Biblical studies</a>	<a href="#">Martin Prudký</a> <a href="#">Petr Pokorný</a>	<a href="#">Protestant Theological Faculty</a>

## Ecumenical Theology, confessionalism and nationalism

Research Topic	Principal Investigators	Faculty
<a href="#">Ecumenical Theology</a>	<a href="#">Ivana Noble</a>	<a href="#">Protestant Theological Faculty</a>
<a href="#">Confessionalism and Nationalism</a>	<a href="#">Jan B. Lášek</a>	<a href="#">Hussite Theological Faculty</a>

## International law

Research Topic	Principal Investigators	Faculty
<a href="#">Legal systems of the Far East and European Law</a>	<a href="#">Michal Tomášek</a>	<a href="#">Faculty of Law</a>
<a href="#">Compensation in international law</a>	<a href="#">Pavel Šturma</a>	<a href="#">Faculty of Law</a>

## Constitutional law

Research Topic	Principal Investigators	Faculty
<a href="#">Analysis of the constitutional system of the Czech Republic and proposals for its changes</a>	<a href="#">Aleš Gerloch</a>	<a href="#">Faculty of Law</a>

## Cardiovascular diseases

Research Topic	Principal Investigators	Faculty
<a href="#">Cardiovascular diseases</a>	<a href="#">Petr Widimský</a> <a href="#">Aleš Linhart</a> <a href="#">Josef Veselka</a> <a href="#">Jan Filipovský</a> <a href="#">Jan Harrer</a>	<a href="#">Medical faculties</a>

## Experimental surgery

Research Topic	Principal Investigators	Faculty
<a href="#">Experimental Surgery</a>	<a href="#">Martin Krbec</a> <a href="#">Robert Gürlich</a> <a href="#">Andrej Sukop</a> <a href="#">Ivan Landor</a> <a href="#">Vladislav Třeška</a> <a href="#">Václav Liška</a>	<a href="#">Medical faculties</a>
<a href="#">Organ replacement, support and regeneration</a>	<a href="#">Martin Matějovič</a> <a href="#">Vladislav Třeška</a>	<a href="#">Medical faculties</a>

## Metabolism

Research Topic	Principal Investigators	Faculty
<a href="#">Metabolism</a>	<a href="#">Jan Škrha</a> <a href="#">Michal Anděl</a> <a href="#">Dana Müllerová</a>	<a href="#">Medical faculties</a>
<a href="#">Sepsis</a>	<a href="#">Martin Matějovič</a> <a href="#">Milan Štengl</a> <a href="#">Jaroslav Hrabák</a>	<a href="#">Medical faculties</a>

## Neurosciences

Research Topic	Principal Investigators	Faculty
<a href="#">Neurosciences</a>	<a href="#">Evžen Růžička</a> <a href="#">Jakub Hort</a> <a href="#">Cyril Höschl</a> <a href="#">Karel Ježek</a>	<a href="#">Medical faculties</a>

## Oncology and tumor biology

Research Topic	Principal Investigators	Faculty
<a href="#">Oncology</a>	<a href="#">Aleksi Šedo</a> <a href="#">Jan Starý</a> <a href="#">Václav Mandys</a> <a href="#">Jiří Petera</a> <a href="#">Jindřich Fínek</a>	<a href="#">Medical faculties</a>
<a href="#">The regulation of cell, tissue and organ development in health and disease</a>	<a href="#">Jan Brábek</a>	<a href="#">Faculty of Science</a>

## Drug discovery and development

Research Topic	Principal Investigators	Faculty
<a href="#">Study of Toxic and Protective Effects of Drugs on Cardiovascular System</a>	<a href="#">Tomáš Šimůnek</a>	<a href="#">Faculty of Pharmacy</a>
<a href="#">Specialized Team for Advanced Research on Separation Science - STARSS</a>	<a href="#">Petr Solich</a>	<a href="#">Faculty of Pharmacy</a>
<a href="#">Development of novel drugs against tuberculosis and its multidrug-resistant forms</a>	<a href="#">Alexandr Hrabálek</a>	<a href="#">Faculty of Pharmacy</a>

## The Czech National Corpus

Research Topic	Principal Investigators	Faculty
<a href="#">The Czech National Corpus: research infrastructure for empirical language-oriented inquiry</a>	<a href="#">Václav Cvrček</a> <a href="#">Vladimír Petkevič</a> <a href="#">Michal Křen</a>	<a href="#">Faculty of Arts</a>

## Modern thought and crisis of Identity

Research Topic	Principal Investigators	Faculty
<a href="#">Crisis of rationality and modern thought</a>	<a href="#">Karel Thein</a> <a href="#">Tomáš Halík</a>	<a href="#">Faculty of Arts</a>
<a href="#">Identities, Canons, Pop-culture: A Comparative Approach</a>	<a href="#">Martin Procházka</a> <a href="#">Petr Bílek</a> <a href="#">Jan Wiendl</a>	<a href="#">Faculty of Arts</a>

## Language and the human mind

Research Topic	Principal Investigators	Faculty
<a href="#">Language and the human mind: understanding the way we communicate</a>	<a href="#">Mirjam Fried</a> <a href="#">Pavel Machač</a> <a href="#">Ronald Kim</a>	<a href="#">Faculty of Arts</a>
<a href="#">Blurred boundaries of Medieval texts: Digital editing and interpreting</a>	<a href="#">Martin Nejedlý</a> <a href="#">Jan Klápště</a> <a href="#">Lucie Doležalová</a>	<a href="#">Faculty of Arts</a>

## Sinology for 21st century

Research Topic	Principal Investigators	Faculty
<a href="#">Sinology for 21st century</a>	<a href="#">Olga Lomová</a>	<a href="#">Faculty of Arts</a>

## Czech egyptology and research on complex civilisation

Research Topic	Principal Investigators	Faculty
<a href="#">Czech egyptology and research on complex civilisation and resilience processes</a>	<a href="#">Miroslav Bárta</a>	<a href="#">Faculty of Arts</a>

## History – transcontinental studies: Europe and/vs. the World

Research Topic	Principal Investigators	Faculty
<a href="#">History – transcontinental studies: Europe and/vs. the World</a>	<a href="#">Michal Pullmann</a> <a href="#">Ivan Šedivý</a> <a href="#">Markéta Křížová</a>	<a href="#">Faculty of Arts</a>

## Synthesis and catalysis

Research Topic	Principal Investigators	Faculty
<a href="#">Organoelement Chemistry, Organic and Inorganic Synthesis and Catalysis</a>	<a href="#">Petr Štěpnička</a> <a href="#">Martin Kotora</a> <a href="#">Jiří Čejka</a> <a href="#">Jan Veselý</a>	<a href="#">Faculty of Science</a>

## Geochemistry and geodynamics

Research Topic	Principal Investigators	Faculty
<a href="#">Endogenous geodynamics in Geology</a>	<a href="#">Shah Wali Faryad</a>	<a href="#">Faculty of Science</a>
<a href="#">Environmental geochemistry group</a>	<a href="#">Martin Mihaljevič</a>	

## Parasitology, infection biology and eukaryotic microbiology

Research Topic	Principal Investigators	Faculty
<a href="#">Cellular and molecular basis of the host-pathogen relationships</a>	<a href="#">Petr Horák</a>	<a href="#">Faculty of Science</a>
<a href="#">Eukaryotic mikrobiology and protistology</a>	<a href="#">Jan Tachezy</a> <a href="#">Petr Volf</a>	<a href="#">Faculty of Science</a>

## Geography

Research Topic	Principal Investigators	Faculty
<a href="#">Transformation of socio-geographic and demographic realities of Czechia in European and global contexts</a>	<a href="#">Dušan Drbohlav</a>	<a href="#">Faculty of Science</a>
<a href="#">Physical Geography, Cartography and GeoInformatics</a>	<a href="#">Bohumír Janský</a>	<a href="#">Faculty of Science</a>

## Ecology, evolutionary biology and biodiversity

Research Topic	Principal Investigators	Faculty
<a href="#">Ecology and biodiversity – from individuals to the biosphere, from past to the future</a>	<a href="#">David Storch</a> <a href="#">Jan Frouz</a> <a href="#">Adam Petrušek</a>	<a href="#">Faculty of Science</a> <a href="#">Center for Theoretical Study</a> <a href="#">Environment Center</a>
<a href="#">Phylogeny and diversity of multicellular organisms</a>	<a href="#">Pavel Munclinger</a>	<a href="#">Faculty of Science</a>

## Mathematical structures in algebra, geometry and logic

Research Topic	Principal Investigators	Faculty
<a href="#">Mathematical structures in algebra, geometry and logic</a>	<a href="#">Jan Krajček</a>	<a href="#">Faculty of Mathematics and Physics</a>

## Intelligent Systems and Computing

Research Topic	Principal Investigators	Faculty

<a href="#">Intelligent Systems and Computing</a>	<a href="#">Roman Barták</a> <a href="#">Tomáš Skopal</a> <a href="#">Tomáš Bureš</a> <a href="#">Jaroslav Křivánek</a> <a href="#">Jan Hajič</a>	<a href="#">Faculty of Mathematics and Physics</a>
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## Theoretical computer science and combinatorics

Research Topic	Principal Investigators	Faculty
<a href="#">Theoretical computer science and combinatorics</a>	<a href="#">Michal Koucký</a> <a href="#">Martin Loebl</a> <a href="#">Jaroslav Nešetřil</a> <a href="#">Jiří Sgall</a>	<a href="#">Faculty of Mathematics and Physics</a>

## General relativity and gravitation, relativistic astrophysics and cosmology

Research Topic	Principal Investigators	Faculty
<a href="#">General relativity and gravitation, relativistic astrophysics and cosmology</a>	<a href="#">Jiří Bičák</a>	<a href="#">Faculty of Mathematics and Physics</a>

## Analysis, modeling and computational mathematics

Research Topic	Principal Investigators	Faculty
<a href="#">Analysis, modeling and computational mathematics</a>	<a href="#">Jan Malý</a> <a href="#">Josef Málek</a> <a href="#">Zdeněk Strakoš</a>	<a href="#">Faculty of Mathematics and Physics</a>

## Material science and nanotechnology

Research Topic	Principal Investigators	Faculty
<a href="#">Modern materials</a>	<a href="#">Václav Holý</a> <a href="#">Miloš Janeček</a>	<a href="#">Faculty of Mathematics and Physics</a>
<a href="#">Optical spectroscopy of individual nanoobjects</a>	<a href="#">Jan Valenta</a>	<a href="#">Faculty of Mathematics and Physics</a>
<a href="#">OptoSpintronics</a>	<a href="#">Petr Němec</a>	<a href="#">Faculty of Mathematics and Physics</a>
<a href="#">Structure of thin layers and nanoparticles</a>	<a href="#">Václav Holý</a>	<a href="#">Faculty of Mathematics and Physics</a>
<a href="#">Surface physics</a>	<a href="#">Iva Matolínová</a> <a href="#">Karel Mašek</a>	<a href="#">Faculty of Mathematics and Physics</a>
<a href="#">Nanomaterial Modeling</a>	<a href="#">Petr Nachtigall</a> <a href="#">Filip Uhlík</a> <a href="#">Peter Košovan</a>	<a href="#">Faculty of Science</a>

## Particle and nuclear physics

Research Topic	Principal Investigators	Faculty
<a href="#">Particle and Nuclear Physics</a>	<a href="#">Rupert Leitner</a>	<a href="#">Faculty of Mathematics and Physics</a>

## Stochastic geometry, stochastic analysis and spatial statistics

Research Topic	Principal Investigators	Faculty
<a href="#">Stochastic geometry, stochastic analysis and spatial statistics</a>	<a href="#">Viktor Beneš</a> <a href="#">Lev Klebanov</a> <a href="#">Bohdan Maslowski</a> <a href="#">Jan Rataj</a>	<a href="#">Faculty of Mathematics and Physics</a>

## Innovations in Didactics of Teaching

Research Topic	Principal Investigators	Faculty
<a href="#">Professional development of Teacher's Education</a>	<a href="#">Radka Wildová</a>	<a href="#">Faculty of Education</a>

	<a href="#">Michal Nedělka</a>	
<a href="#">Educational effectiveness, assessment and its evaluation</a>	<a href="#">Jana Straková</a> <a href="#">David Greger</a>	<a href="#">Faculty of Education</a>
<a href="#">Subject didactics research</a>	<a href="#">Naďa Vondrová</a> <a href="#">Martin Bílek</a> <a href="#">Martina Šmejkalová</a> <a href="#">Miroslava Černochová</a> <a href="#">Jana Stará</a>	<a href="#">Faculty of Education</a>
<a href="#">Research of the psychological development of a child under the influence of scholarization</a>	<a href="#">Anna Kucharská</a>	<a href="#">Faculty of Education</a>
<a href="#">Modern methods in education</a>	<a href="#">Stanislav Štípek</a>	<a href="#">Central Library of Charles University</a>

## People with special needs and long-term care

Research Topic	Principal Investigators	Faculty
<a href="#">Special education - care, support, intervention</a>	<a href="#">Lea Květoňová</a>	<a href="#">Faculty of Education</a>
<a href="#">Expertise in Longevity and Long-term Care</a>	<a href="#">Iva Holmerová</a>	<a href="#">Faculty of Humanities</a>

## Public and social policy

Research Topic	Principal Investigators	Faculty
<a href="#">Policy design and policy work</a>	<a href="#">Arnošt Veselý</a>	<a href="#">Faculty of Social Sciences</a>

## Collective memory as a theoretical and research concept

Research Topic	Principal Investigators	Faculty
<a href="#">Memory and Politics in Transformations of (Post-)Conflict Societies</a>	<a href="#">Tomáš Weiss</a> <a href="#">Kateřina Králová</a>	<a href="#">Faculty of Social Sciences</a>
<a href="#">Historical Sociology</a>	<a href="#">Jiří Šubrt</a>	<a href="#">Faculty of Humanities</a>

## Communication, Culture and Politics

Research Topic	Principal Investigators	Faculty
<a href="#">Communication, Culture and Politics</a>	<a href="#">Nico Carpentier</a>	<a href="#">Faculty of Social Sciences</a>

## Sociology

Research Topic	Principal Investigators	Faculty
<a href="#">Politicization of Society and Public Controversies</a>	<a href="#">Ondřej Císař</a> <a href="#">Paulus Albertus Blokker</a> <a href="#">Dino Numerato</a> <a href="#">Zdeněk Uherek</a>	<a href="#">Faculty of Social Sciences</a>

## Inter-Group conflicts, international interactions and security

Research Topic	Principal Investigators	Faculty
<a href="#">Causes and Consequences of Inter-Group Conflict: Experimental Approach</a>	<a href="#">Michal Bauer</a> <a href="#">Julie Chytilová</a>	<a href="#">Faculty of Social Sciences</a> <a href="#">CERGE-EI</a>
<a href="#">International interactions: relations, security, and space</a>	<a href="#">Jan Karlas</a> <a href="#">Nik Hynek</a> <a href="#">Běla Plechanová</a> <a href="#">Michael Romancov</a>	<a href="#">Faculty of Social Sciences</a>

## Sport Sciences

Research Topic	Principal Investigators	Faculty
<a href="#">Biomedical aspects of sport and exercise</a>	<a href="#">Miroslav Petr</a>	<a href="#">Faculty of Physical Education and Sport</a>
<a href="#">Human movement and sport performance</a>	<a href="#">František Zahálka</a>	<a href="#">Faculty of Physical Education and Sport</a>

## **Europhilosophie**

Research Topic	Principal Investigators	Faculty
<a href="#">Interrelations</a>	<a href="#">Karel Novotný</a> <a href="#">Hans Rainer Sepp</a>	<a href="#">Faculty of Humanities</a>