

**Reserach topics in the discipline of physical science**

**In the academic year 2025/2026**

<b>Sg.</b>	<b>PhD Supervisor</b>	<b>ORCID</b>	<b>Contact e-mail</b>	<b>Research topics</b>	<b>Language of the doctoral dissertation</b>
1.	prof. dr hab. Francesco Giacosa	0000-0002-7290-9366	<a href="mailto:fgiacosa@ujk.edu.pl">fgiacosa@ujk.edu.pl</a>	<ol style="list-style-type: none"> <li>1) Unconventional mesons: glueballs and tetraquarks</li> <li>2) Restoration of chiral symmetry at nonzero temperature and density in effective models of QCD</li> <li>3) Modeling the measurement process in quantum mechanics</li> <li>4) Non-exponential decay in Quantum Mechanics and in Quantum Field Theory</li> </ol>	English
2.	dr hab. prof. UJK Paweł Kankiewicz	0000-0001-7645-2618	<a href="mailto:pawel.kankiewicz@ujk.edu.pl">pawel.kankiewicz@ujk.edu.pl</a>	Dynamics of small bodies of the Solar System	Polish/English
3.	prof. dr hab. Tadeusz Kosztołowicz	0000-0001-5710-2970	<a href="mailto:tadeusz.kosztołowicz@ujk.edu.pl">tadeusz.kosztołowicz@ujk.edu.pl</a>	Normal and anomalous diffusion, fractional calculus	Polish
4.	prof. dr hab. Marek Pajek	0000-0002-3888-5209	<a href="mailto:marek.pajek@ujk.edu.pl">marek.pajek@ujk.edu.pl</a>	<ol style="list-style-type: none"> <li>1) Interactions of highly charged ions with surfaces</li> <li>2) Recombination processes of ions with electrons in the plasma</li> <li>3) Investigations of relaxation of Rydberg hollow atoms by X-ray spectroscopy</li> </ol>	Polish
5.	prof. dr hab. Maciej Rybczyński	0000-0002-3638-3766	<a href="mailto:maciej.rybczynski@ujk.edu.pl">maciej.rybczynski@ujk.edu.pl</a>  +48 41 349 6468	<ol style="list-style-type: none"> <li>1) Investigation of multiparticle production processes in high-energy nuclear collisions</li> <li>2) Study of fluctuations and correlations in particle production processes</li> </ol>	Polish/English

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				3) Multiplicity fluctuations in collisions of relativistic ions	
<b>6.</b>	dr hab. prof. UJK Grzegorz Stefanek	0000-0001-6656-9177	<a href="mailto:grzegorz.stefanek@ujk.edu.pl">grzegorz.stefanek@ujk.edu.pl</a> 41-3496466	The physics of relativistic heavy-ion collisions	Polish
<b>7.</b>	prof. dr hab. Zbigniew Włodarczyk	0000-0002-5602-9692	<a href="mailto:zbigniew.wlodarczyk@ujk.edu.pl">zbigniew.wlodarczyk@ujk.edu.pl</a>	Fluctuations and correlations in multiparticle production processes	Polish