

# Kombinatorika na slovech a **matematická fyzika**

## Herbertov, 15.–18.6. 2021

Woden's Day 16.6., chair: M. Tušek	
8 <sup>55</sup> – 9 <sup>00</sup>	<b>Very short introduction</b>
9 <sup>00</sup> – 9 <sup>30</sup>	<b>David Krejčířík</b> Bound states in semi-Dirac semi-metals
9 <sup>35</sup> – 10 <sup>05</sup>	<b>Vladimír Lotoreichik</b> Szegő-type inequality for the 2D Dirac operator with infinite mass boundary conditions
10 <sup>10</sup> – 10 <sup>40</sup>	<b>Lukáš Heriban</b> Non-self-adjoint relativistic point interactions and their approximations by non-local potentials
10 <sup>45</sup> – 11 <sup>00</sup>	<b>Water break</b>
11 <sup>00</sup> – 11 <sup>30</sup>	<b>Borbála Gerhat</b> The spectrum of the Ekman boundary layer problem
11 <sup>35</sup> – 11 <sup>55</sup>	<b>Jan Kotrbatý</b> A brief introduction to mixed volumes <i>I</i> (miniCOURSE)
12 <sup>00</sup> – 13 <sup>00</sup>	<b>Lunch</b>
13 <sup>00</sup> – 18 <sup>00</sup>	<b>Hard work</b>
Thor's Day 17.6., chair: D. Krejčířík	
9 <sup>00</sup> – 9 <sup>30</sup>	<b>František Štampach</b> Spectral bounds for 1D discrete Schrödinger operators with complex potentials
9 <sup>35</sup> – 10 <sup>05</sup>	<b>David Kramár</b> Solvable models in quasi-Hermitian quantum mechanics
10 <sup>10</sup> – 10 <sup>40</sup>	<b>Tomáš Kalvoda</b> The Möbius Strip
10 <sup>45</sup> – 11 <sup>00</sup>	<b>Water break</b>
11 <sup>00</sup> – 11 <sup>30</sup>	<b>Tomáš Faikl</b> Metamaterial transitions on curved manifolds
11 <sup>35</sup> – 11 <sup>55</sup>	<b>Jan Kotrbatý</b> A brief introduction to mixed volumes <i>II</i> (miniCOURSE)
12 <sup>00</sup> – 13 <sup>00</sup>	<b>Lunch</b>
13 <sup>00</sup> – 18 <sup>00</sup>	<b>More hard work</b>
Freya's Day 18.6., chair: S. Pošta	
9 <sup>00</sup> – 9 <sup>30</sup>	<b>Rudolf Šmolka</b> Painting a Picture of Surreal Numbers
9 <sup>35</sup> – 10 <sup>05</sup>	<b>Šimon Vědl</b> Clifford's Geometric Algebra in Differential Geometry
10 <sup>10</sup> – 10 <sup>40</sup>	<b>Romana Kvasničková</b> Effective quantum Hamiltonian in thin domains with non-homogeneity
10 <sup>45</sup> – 11 <sup>00</sup>	<b>Water break</b>
11 <sup>00</sup> – 11 <sup>30</sup>	<b>Lukáš Vácha</b> Variation on harmonic theme
11 <sup>35</sup> – 12 <sup>05</sup>	<b>Iveta Semorádová</b> Diverging eigenvalues in domain truncations of Schrödinger operators with complex potentials
12 <sup>10</sup> – 13 <sup>00</sup>	<b>Lunch</b>