

Program: Bethe Forum „Multihadron Dynamics in a Box - A.D. 2022“

August 15 - 19, 2022 - bctp Bonn

| Monday, 15.08. | | Tuesday, 16.08. | Wednesday, 17.08. | Thursday, 18.08. | Friday, 19.08. |
|----------------|---|--|--|--|--|
| 9:00 - 9:50 | Registration and welcome | | | | 9:00 - 10:40 Path from lattice QCD to neutrinoless double-beta decay amplitude Kadam |
| 9:50 - 10:40 | Extracting the $a_1(1260)$ finite-volume spectrum with elongated lattices Culver | Applications and developments of the relativistic three-particle formalism Romero | Implementing the three-particle quantization condition for 2+1 systems: theoretical issues Sharpe | Two-nucleon scattering from finite-volume energies Epelbaum | 10:40 - 11:10 The nucleon-pion scattering lengths from lattice QCD at $m_{\pi} = 200 \text{ MeV}$ Bulava |
| 10:40 - 11:30 | Two- and Three-meson systems beyond s-wave from lattice QCD Hanlon | Scattering from generalized lattice ϕ^4 theory Garofalo | Non-perturbative range corrections and spurious poles in finite volume Ebert | Recent results in HAL QCD method Aoki | 10:40 - 11:10 Coffee Break |
| | | | | | 11:10 - 12:00 Hadronic interactions from lattice QCD with $O(a)$ improved Wilson fermions Wittig |
| 11:30 - 13:00 | Lunch Break | Lunch Break | Lunch Break | Lunch Break | 12:00 - 12:50 TBA Mohler |
| 13:00 - 13:50 | D π scattering and charm meson resonances from lattice QCD Thomas | Multihadron scattering in elongated boxes Lee | Recent developments to three-particle quantization conditions. Blanton | Finite Volume Pionless Effective Field Theory for lattice QCD calculations of nuclei I Shanahan | 12:50 Organizers' Farewell |

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| 13.50 - 14:40 | Resonances in coupled-channel scattering Wilson | Simple three-pion and kaon systems from lattice QCD Döring | Relativistic invariance of the NREFT three-particle quantization condition Mueller | Finite Volume Pionless Effective Field Theory for lattice QCD calculations of nuclei II Detmold | | | | | |
| 14:40 - 15:10 | Coffee Break | Coffee Break | Coffee Break | Coffee Break | | | | | |
| 15:10 - 16:00 | Long-range electroweak processes involving few-hadron states Briceno | Implementing the RFT scattering and decay formalism across all three-pion isospin channels Hansen | Towards the finite-volume spectrum of the Roper resonance Severt | Lattice Effective Field Theory for Light and Medium-Mass Nuclei Elhatisari | | | | | |
| 16:00 - 16:50 | Resonance form factors from finite-volume correlation functions with the external field method Lozano | Particles interaction in artificial traps Guo | Extending the applicability of 3-particle quantization conditions Draper | Few body hypernuclei Nogga | | | | | |
| 17:00 - 19:00 | Reception | | | 19:00 Social Dinner | | | | | |