

XXV International Baldin Seminar on High Energy Physics Problems  
"Relativistic Nuclear Physics and Quantum Chromodynamics"



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on High Energy Physics Problems  
*Relativistic Nuclear Physics & Quantum Chromodynamics*  
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## Energy levels of pionic and kaonic helium in variational approach.

*Friday, 22 September 2023 09:20 (20 minutes)*

Energy levels of three-particle bound systems composed of a helium nucleus, electron in 1S ground state and  $\text{Pi}^-$ ,  $\text{K}^-$  mesons in Rydberg state with principal and orbital momentum quantum numbers of  $n \sim l+1 \sim 17$  are studied in variational approach in quantum electrodynamics. Vacuum polarization and relativistic corrections are taken into account.

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