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**Lower bounds for quasi-bound state energy of three-Body kaonic clusters**[1] ROMAN KEZERASHVILI, New York City College of Technology, CUNY, IGOR FILIKHIN, BRANISLAV VLAHOVIC, North Carolina Central University — The kaonic clusters $K^-K^-p$ and $ppK^-$ are described based on the configuration space Faddeev equations for $AAB$ system. The $AB$ interaction is given by phenomenological isospin-dependent potentials. We show that the relation $|E_3(V_{AA}=0)| < 2\,|E_2|$ is satisfied when $E_2$ is the binding energy of the $AB$ subsystem and $E_3(V_{AA}=0)$ is the three-body binding energy and $V_{AA}$ is the interaction between the identical particles. For the $NN\bar{K}$ system, taking into account weak attraction of $NN$ interaction the relation leads to the evaluation $|E_3| \leq 2|E_2|$.

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