Strongly indefinite Hamiltonian system with weights and nonlinearity involving critical Hardy-Sobolev exponents

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Abstract. We have been studied the existence and multiplicity of nontrivial solutions for a class of Hamiltonian systems with weights and nonlinearity involving the critical Hardy-Sobolev exponent. Here, we will enunciate some of the results that we have obtained. All results are proved using variational methods for strongly indefinite functionals.