DEVELOPMENT OF MACHINE LEARNING TECHNIQUES AND NEURAL NETWORK ALGORITHMS IN PHYSICS

A step toward CERN - CMS collaboration

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The Research Expertise from the Academic Diaspora (READ) Fellowship Program, was founded by the Albanian-American Development Foundation to provide a formalized and structured opportunity through which the Albanian academic Diaspora can contribute to the development of higher education institutions in Albania and the overall development of scientific research in the country. During the second call of applications, one of the winner projects was our project: "Development of Machine Learning techniques and Neural Network algorithms in physics, A step toward CERN - CMS collaboration". Supported and funded by READ, a group of physicists from the Department of Physics, University of Tirana and the Department of Physics Engineering, Polytechnic University of Tirana, directed by Prof. Asoc. Dr. Rudina Osmanaj and the Diaspora Fellow Dr. Ilirjan Margjeka, from the INFN, section Bari and CMS/CERN, developed this project with a main purpose: Be part of CMS Collaboration as a Cooperating Institute, and soon, after some years, gain a full membership in this international collaboration.