

# 55 years of relativistic heavy ion collisions with accelerator systems. Contributions of the Faculty of Physics from the University of Bucharest

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In 1948 Dr. Phyllis Freier and his team discovered the relativistic heavy ions component of the primary cosmic rays. A new field in Nuclear and Particle Physics became. In August 1970, the first heavy ions beam was used at the JINR Dubna to evidence the cumulative negative pions production in d-C collisions at 5 A GeV, using a linear accelerator and the Synchrophasotron U-10. Members of the Atomic and Nuclear Physics Chair staff were involved in these experiments. Since the beginning of the accelerator systems era, other important laboratories have been involved in research in this fascinating field High Energy Physics and Nuclear Physics. Members of the chair staff have been involved during this time in a few international experiments. Taking into account these facts, in this work, a synthesis of the interesting results obtained in more than 5 decades, beginning with experiments from JINR Dubna and continuing with SPS-CERN, BNL-RHIC experiments, as well as the expectations from CBM Experiment at GSI-FAIR, will be presented.

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