## Bucharest emulsion group along the time

Who we are

## Milla Baldo Ceolin THE DISCREET CHARM OF THE NUCLEAR EMULSION ERA

But when I think of that period in my professional life, nostalgia overcomes me, along with an urge to speak about the enthusiasm and the vigor of those days when we had the feeling of advancing another step, however small, toward understanding the complex phenomena before us.

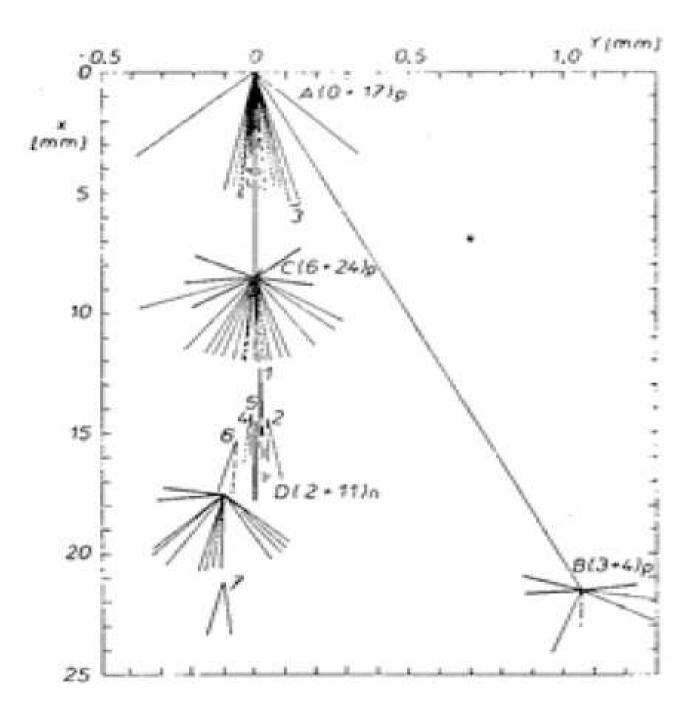
INSIDE EVERY OLDER PERSON IS A YOUNGER PERSON WONDERING WHAT THE HAPPENED.

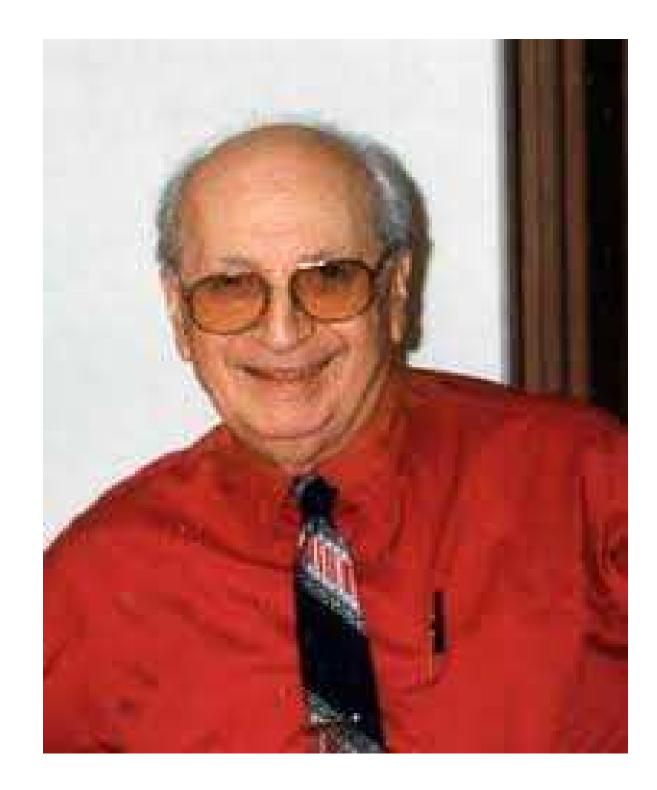
- 1956 Institute of Atomic Physics
- Laboratory of cosmic rays
- 1958



**Figure 1** A balloon ready for the ascent in the Sardinia area in July 1953. For the first time, emulsion stacks were made up of 40 stripped emulsions bound together between thick glass plates, wrapped and sealed and subsequently marked with X-rays.





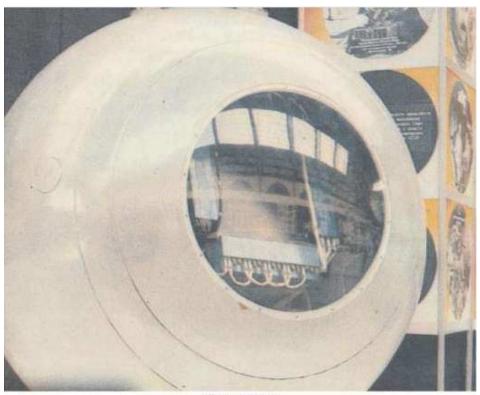




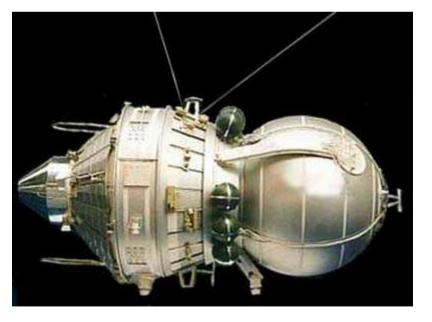


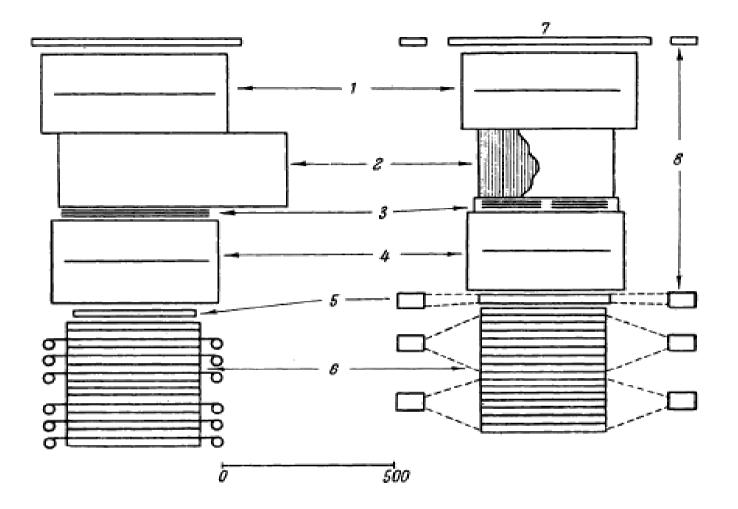


- CERN ISR a particle accelerator , the first hadron collider, and run with a maximum center of mass energy of 62 GeV
- 1972 The ratio of the production of very slow antiprotons to that of pions in the same momentum interval was measured at the ISR by means of nuclear emulsions. Averaged over the interval 0.12 GeV/c ? *p*⊥ ? 0.34 GeV/c and 0 ? *p*<sub>||</sub> ? 0.2 GeV/c, .



Intercosmos 6





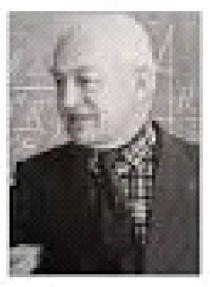
4 track spark chambers
emulsion stack
horizontal emulsion sheets
, 7 scintillators
Ionization calorimeter
PM

We scanned for mini electron positron showers and traced them back until we fond their origin - the interaction of nuclei. In five events selected for analysis, as a result of 67 interaction, we determined the mean multiplicity 3.3+-0.7. The energy of the primaries was eveluated as above 1 TeV.

## The 2-nd Soviet satellite





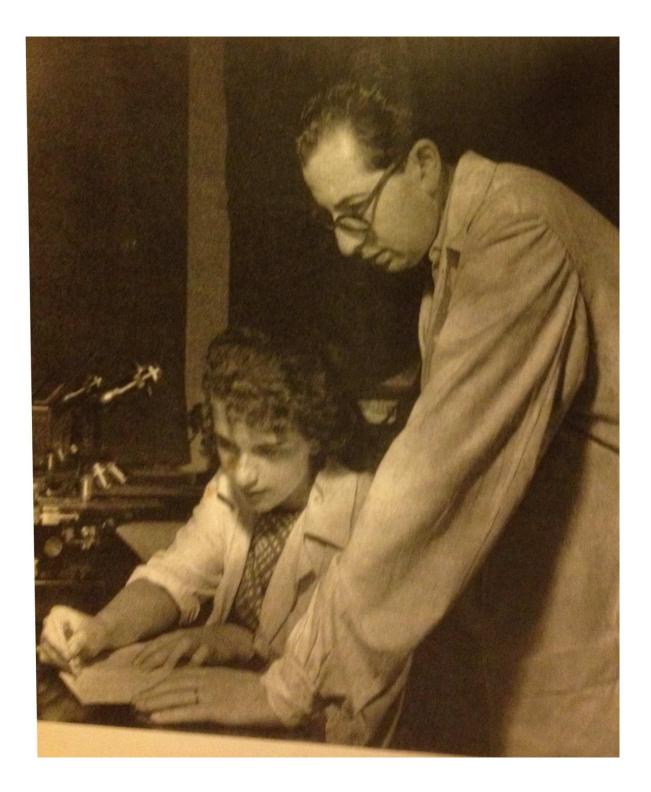




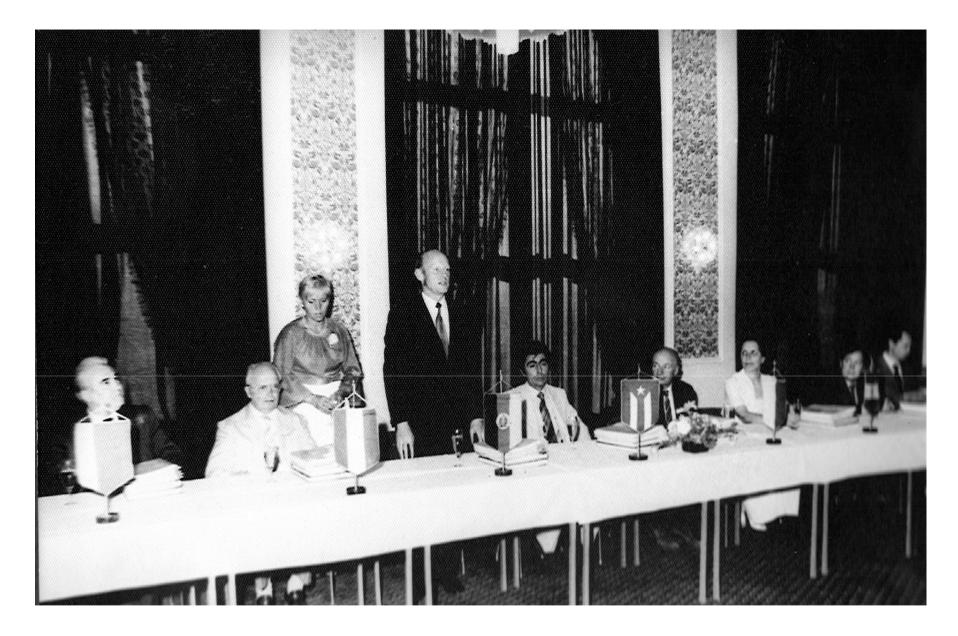
S. N. Vernov, N.L.Grigorov, A.E. Chudakov



Yu. I. Logachev



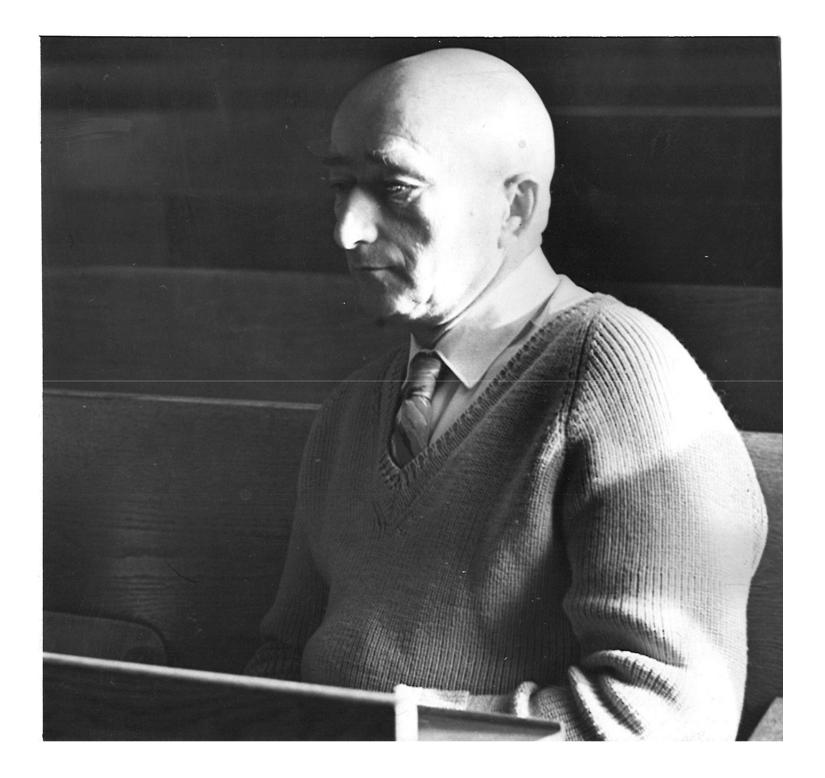




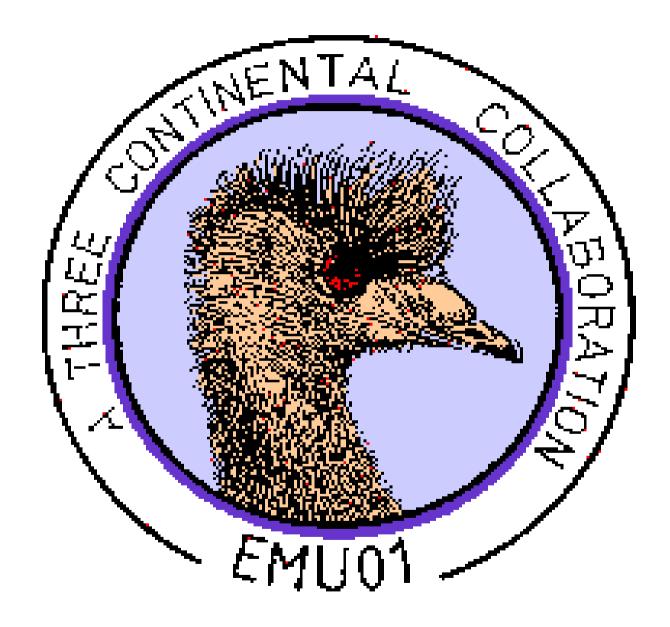
## Intercosmos











- Production of Slow Particles in High Energy Heavy Ion Collisions
- Helium Production in 158A GeV/c Pb on Pb Interactions
- Helium Production in 10.7A GeV/c Au induced Nucleus-Nucleus Collisions
- Produced Particle Multiplicity Dependence on Centrality in Nucleus-Nucleus Collisions
- Complex Analysis of Au Interactions with Photo-Emulsion Nuclei at 10.7 GeV/nucleon within the framework of Cascade and Fritiof models
- Multifragmentation of Au Nuclei at 10.7 GeV/nucleon
- Nuclear Effect in Higher Dimensional Factorial Moment Analysis of 160-, 32S-, & 197Au-Em interaction data at 200, 60 and 11GeV/c
- Critical Behaviour in Au Fragmentation at 10.7A GeV/c
- Charged Particle Multiplicity Density and Fluctuations in Pb on Pb Interactions at 158A GeV/c
- Bounce-off in 197Au Induced Collisions with Ag(Br) Nuclei at 116 A GeV/c
- Fragmentation and Multifragmentation of 10.6 A GeV Gold Nuclei

