COSMIC RAY NUCLEI AT HIGH ENERGIES: RECENT RE-SULTS FROM TRACER AND FUTURE PROSPECTS

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The first balloon flight of the TRACER instrument in 1999 led to a new measurement of the energy spectra of cosmic ray nuclei from Z=8 to Z=26 at energies from 10 GeV/nucleon to a few TeV/nucleon. We will present and discuss the results, compare them with other recent measurements and examine the implications for current cosmic ray propagation and acceleration models. Finally, we will comment on the prospects of planned flights of the TRACER instrument on long duration balloons, and on the adaptation of the measurement technique to anticipated space missions.