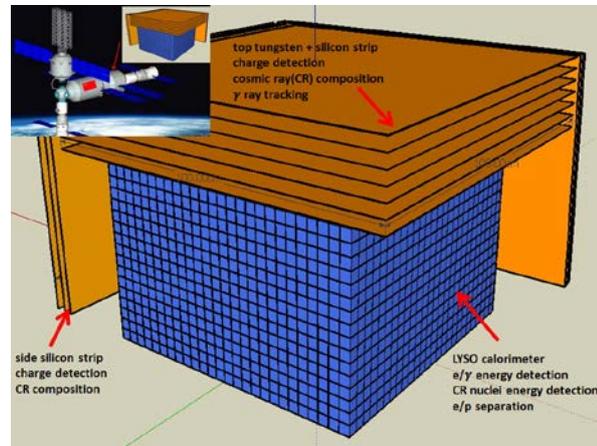




## The 2nd HERD Workshop, Dec 1-4, 2013, IHEP, Beijing, China

Dear Colleagues,

The High Energy cosmic-Radiation Detection (HERD) facility onboard China's Spacestation is planned for operation around 2020. Its main scientific objectives are indirect dark matter search in space, precise cosmic ray spectrum and composition measurements up to the "Knee" energy, and high energy gamma-ray monitoring and survey.



The 1st international workshop on HERD, held at IHEP in Beijing in October 2012, was a great success; many leading scientists in particle physics, astrophysics, cosmic ray physics attended the workshop and contributed a lot to the scientific objectives, mission definition and design concept.

Since then, there has been gradual evolution in both mission concept and hardware development during the past year. Several versions of baseline designs have been made and evaluated with extensive Monte-Carlo simulations. The most recent one is made of a full-3D calorimeter surrounded by Si-trips from all five sides; a recent presentation of mine on this baseline design is available on the website of this meeting for your reference. In the mean time, we have also made some progress in the fiber-ICCD readout system, which is essential for reading out the signals of the around ten thousands LYSO crystals in the 3D calorimeter.

Recently AMS02 team has released several interesting results, highlighting the scientific needs for further high precision measurements of cosmic high energy radiation up to much higher energies and with much larger acceptance. Considering the fact that CALET and CREAM will be operating at ISS from 2014 and DAMPE satellite will be launched in late 2015, we believe it is now the right time we work together to design and build the next generation experiments beyond AMS02, CALET, CREAM and DAMPE.

The 2nd international workshop on HERD will be held in Beijing during December 1-4, 2013. It will focus on 1) up-to-date progress in observations and theories of space dark matter search, cosmic ray physics and high energy gamma-ray astronomy; 2) HERD scientific objectives; 3) HERD payload configuration, requirements and feasibility; 4) HERD technical progress and possible solutions; 5) any related scientific and technical subjects.



Considering your expertise in the field and your possible interests to contribute to this mission, we would like to invite you to participate in this workshop; at the bottom of this announcement, you can find the list of international invitees and preliminary list of Chinese participants to this workshop.

We would appreciate if you could respond ASAP if you plan to attend the workshop and make a presentation, by registering at the workshop website <http://indico.ihep.ac.cn/conferenceDisplay.py?confId=3808>, where you also get more information about the workshop. Please contact Dr. Yongwei Dong ([dongyw@ihep.ac.cn](mailto:dongyw@ihep.ac.cn)), the coordinator of the HERD mission study, for any further correspondence related to this workshop and the mission.

I look forward to meeting you in Beijing in December 1-4, 2013.

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Preliminary list of international invitees (in alphabetical order):

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