

Postdoctoral Position with Space Science and Applications Group at Los Alamos National Laboratory

The Space Science and Applications group (ISR-1) in the Intelligence and Space Research (ISR) division leads a variety of civilian and defense-related programs sponsored by DOE, DOD, NASA, and other US agencies. In support of these missions, we develop sensors to detect nuclear emissions and measure natural and man-made radiations in space. ISR-1 capabilities extend from mission concept to design and calibration, data analysis, simulation and modeling. ISR division capabilities include engineering design and fabrication, spacecraft integration, ground system support and on-orbit operation.

By providing satellite-borne gamma-ray, X-ray, and neutron detectors to the US government, ISR-1 supports monitoring of the atmosphere and near-Earth space for nuclear detonations. Similarly, our charged-particle detectors support measurement of the natural environment. We have an international reputation in the detection of nuclear phenomenology and in the data analysis, simulation and modeling of the natural environment. ISR-1 is engaged in a number of pioneering basic-science missions, greatly enhancing our research and contributing to our technological base. Our many postdocs and affiliates are key collaborators. These science programs cover several disciplines, including magnetospheric physics, planetary exploration, gamma-ray astrophysics, space situational awareness, and solar-terrestrial interactions.

The group is currently seeking postdoctoral candidates to work in one of the following areas:

- magnetospheric and heliospheric research with a focus on data analysis and numerical modeling studies, space weather nowcasting, forecasting, and effects on space assets
- development of advanced X-ray, gamma-ray, neutron, energetic particle, and plasma sensing instruments for applications in nuclear security, space environment science, high-energy astrophysics, and planetary sciences

Significant experience in one of the following is a plus:

- data analysis from past or current magnetospheric or heliospheric missions or modeling of associated space physics phenomenologies
- hardware, data analysis, or modeling of data from past or current astrophysics or planetary missions
- design, modeling, simulation, or development of advanced sensing instruments for energetic radiation, plasmas, or particles
- work in radiation calibration facilities, beam lines, or plasma generators

The candidates are expected to have a demonstrated ability to work independently and as a member of a team, with good communication skills.

Postdoctoral candidates are required to have a Ph.D. degree, completed within the past five years, or soon to be completed. Appointments are for two years, renewable for a third year. Candidates who have the ability to obtain a DOE “Q” clearance will have more opportunities. To obtain a clearance, an individual must be at least 18 years of age and be a U.S. citizen.

Interested applicants should send their CV with a cover letter describing research interests to:

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