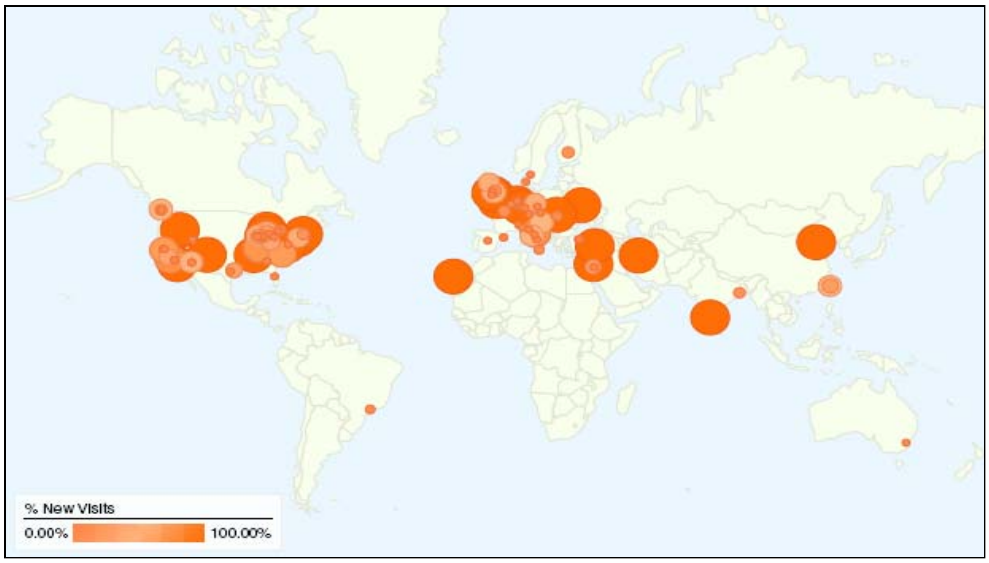
The Joint Institute for Nuclear Astrophysics

# Virtual Journals for Nuclear Astrophysics



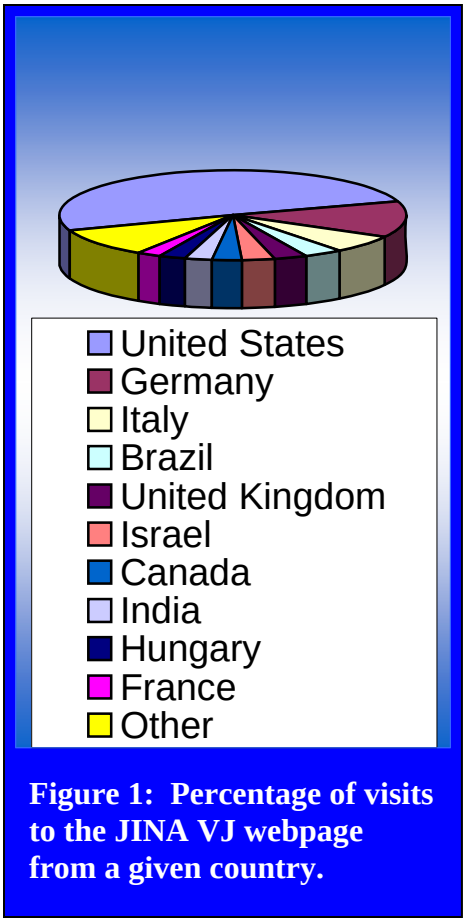




**Figure 1: Percentage of visits to the JINA VJ webpage from a given country.**

**Nuclear Astrophysics is an interdisciplinary subject with contributions from many branches of physics and astrophysics. A researcher studying the r-process, which synthesizes half of the elements must be familiar with measurements of nuclear lifetimes and masses, shell model calculations of nuclear properties, models of supernova explosions, freeze-out processes, and abundances in metal-poor stars. This information appears in a broad array of journals. It is therefore difficult for researchers in nuclear astrophysics, especially young researchers, to be cognizant of all the literature bearing on their research.**

**To address this problem we founded, in 2003, the Virtual Journal of Nuclear Astrophysics. Relevant articles in about 40 publications are surveyed by a physicist and an astronomer, and one or more categories are assigned; reaction rate and/or r process, for example, to facilitate searches. An on-line list of these articles is prepared weekly, and those interested, about 285 individuals, are notified using a list server or an RSS feed. The search capability permits one to search by keyword(s), by author(s), and/or by the assigned category.**

**There are several recent developments: (1) The Virtual Journal is now being used as an important source of data for the on-line database REACLIB. (2) The success of the Virtual Journal led us to establish the Segue Virtual Journal, specific to observers and in particular the SEGUE project (Sloan Extension for Galactic Astronomy and Exploration). (3) The infrastructure for both these VJs has been updated and streamlined to use modern database techniques based on MySQL.**

Links:
JINA Virtual Journal
Segue Virtual Journal
JINA VJ Search Page
Journals surveyed

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