

Origins of the asteroid-impact hypothesis FREE

Nicholas R. White



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For our location in Zeuthen we are seeking:

Senior Scientist Accelerator Physics – Tenure Track

Limited: initially limited to 5 years with the possibility of conversion to a permanent position | Starting date: earliest possible | ID: APMA012/2021 | Deadline: 15.07.2021

DESY, with its 2700 employees at its two locations in Hamburg and Zeuthen, is one of the world's leading research centres. Its research focuses on decoding the structure and function of matter, from the smallest particles of the universe to the building blocks of life. In this way, DESY contributes to solving the major questions and urgent challenges facing science, society and industry. With its ultramodern research infrastructure, its interdisciplinary research platforms and its international networks, DESY offers a highly attractive working environment in the fields of science, technology and administration as well as for the education of highly qualified young scientists.

The photo-injector test facility at DESY in Zeuthen (PITZ, near Berlin) will be expanded to advance the research and development of tumor therapies with short irradiation durations at high dose rates as well as high electron beam energy (so-called FLASH and VHEE radiotherapies). These promise better tumor control with fewer side effects in healthy tissue. The extremely wide parameter range for electron beams available at PITZ and the high flexibility of the facility allow unique research opportunities for future tailored applications in humans. We are looking for a project leader with strong accelerator experience, who will lead the expansion of the facility for this project and keep an eye on all major influencing factors together with local and international cooperation partners.

About the role:

- Project management for radiation biology, FLASH and VHEE radiotherapy at PITZ
- Close collaboration with e.g. dosimetry experts, biologists, physicians
- Representation of the project internally and externally
- Participation in the research operation of the PITZ accelerator

To be successful in this role:

- Master's degree in physics with PhD or equivalent qualification
- Profound and several years of experience in development, technology and operation of accelerator facilities and their applications
- Experience in beam dynamics
- Experience in project management
- Well-developed skills in interdisciplinary communication and cooperation in international collaborations
- Business fluent German and English
- Experience in radiation biology, biophysics, medical technology, especially cancer therapy is advantageous

For further information please contact Dr. Frank Stephan at +49 33762 7-7338 (frank.stephan@desy.de).

Applications (in German or English) should include a detailed curriculum vitae, publication list, explanations and evidence of experience background and 3 names for references.

DESY promotes the professional development of women and therefore strongly encourages women to apply for the position to be filled. In addition, severely handicapped persons with equal aptitude are given preferential consideration. The advertised positions are basically suitable for part-time employment.

You can find further information here: www.desy.de/career

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fairness to Trump, the principle of transparency should be praised and the data used in formulating public policy should be made public, even if it requires redaction. That is especially true for medical science, where evidence shows that a significant number of classic studies cannot be reproduced.³

Most people act in good faith. Those whom you dislike are rarely as evil as you might want them to be. Give credit where it is due. And back up criticism with your own transparency. That is the way of science.

References

1. See R. E. Heller III, "Op-Ed: Atlas shrugged? The legacy of Scott Atlas, MD," *MedPage Today* (20 December 2020).
2. See E. A. Grant, *Harvard Public Health* (fall 2012), p. 30.
3. See M. Baker, *Nature* **533**, 452 (2016).

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The April 2021 Back Scatter, "Iridium marks the spot" (page 64), should have given credit to Luis Alvarez, Walter Alvarez, and their team, who proposed the hypothesis that an asteroid impact caused the mass extinction event 66 million years ago, and cited their publication.¹

I was present at conferences where the Alvarez team was ridiculed and insulted because a physicist (Luis Alvarez) dared to intrude on geologists' turf. The team did meticulous research and global checking of the iridium anomaly at the Cretaceous–Paleogene (K–Pg) boundary (or Cretaceous–Tertiary boundary, as it was known in the 1980s). I am glad that that careful work has been independently verified many times over. But the work mentioned in the Back Scatter is not new news, just further confirmation. Please give credit where it is due.

Reference

1. L. W. Alvarez et al., *Science* **208**, 1095 (1980).

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