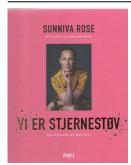


Informative and entertaining about nuclear physics

ANMELDELSER

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Sunniva Rose

Vi er stjernestøv [We are stardust] Nuclear physics for all. 177 pp., ill. Oslo: Egmont Publishing, 2020. ISBN 978-82-42-6911-8

Sunniva Rose is a social media influencer with a PhD in nuclear physics. In recent years, she has demonstrated through her blog that she has a special talent for communicating topical issues in the field of nuclear physics to a wide audience. She has now taken her talent one step further in presenting her material in a book entitled Vi er stjernestøv – kjernefysikk for folk flest [We are stardust - nuclear physics for all]. However, she has kept the personal style from her blog, and she has chosen a pink design for the cover and pages of her book. At first glance, you could easily think that this is a book about topics far removed from nuclear physics. Despite the special design, the book's level of academic precision leaves nothing to be desired. She presents the development of nuclear physics from the discoveries made by Wilhelm Röntgen and Henri Becquerels to modern-day use of nuclear power as a source of energy. The narrative is based on the author's own journey through the world of nuclear physics, supported by anecdotes and background information about the discipline's important milestones. Special attention is given to the discovery of uranium and plutonium as fissionable elements, which lay the foundation for the construction of the atomic bomb and the ensuing development of nuclear power. Just like on earlier occasions, the author is able to present the material in a way that makes it accessible for most people.

A key part of the book describes the various medical methods that are based on the

principles of nuclear physics, from the discovery of X-rays to imaging diagnostics, via the use of radium for cancer treatment to proton beam therapy and the introduction of PET scans. These are areas where the author clearly feels at home. However, her level of accuracy drops when she touches on the biological effects of radioactive radiation, whether through acute radiation syndrome or other clinical conditions. She also argues against prophylactic use of iodine tablets in connection with nuclear accidents unless there is iodine deficiency in the population, without providing sufficient reasoning for this view. Despite these objections, the book can nevertheless be recommended to a wide readership thanks to the author's ability to communicate difficult material from the field of nuclear physics. The book is also highly relevant for doctors and other healthcare personnel who wish to understand more of the mechanisms behind the many medical procedures that involve the use of radioactive sources.

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