Eric Viklund

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Born: May 23, 1997—Stockholm, Sweden
Nationality: Swedish

Current position

Graduate Student, McCormick School of Engineering, Northwestern University

Research Experience

2016-2019 Undergraduate Research Assistant – High Vacuum and Cryogenic Equipment
2019-2024 Graduate Researcher – SRF Technology, Thin Film Science, Surface Characterization

Education

2019 MSc in Physics, University of Connecticut
2024 PhD in Materials Science, Northwestern University

Grants, honours & awards

2022 Accelerator PhD Program, Fermi National Accelerator Laboratory
2023 IPAC'23 Student Grant

Service to the profession

2023 Peer Review for Physical Review Accelerators and Beams
2017-2019 University of Connecticut, Student Tutor
2022 Northwestern University, Teaching Assistant

Publications & talks

[1] E. Viklund, D. N. Seidman, D. Burk, and S. Posen, "Improving nb3sn cavity performance using centrifugal barrel polishing," *arXiv preprint arXiv:2305.10226*, 2023.

[2] E. Viklund, J. Lee, D. Seidman, and S. Posen, "Three-dimensional reconstruction of nb 3 sn films by focused ion beam cross sectional microscopy," *IEEE Transactions on Applied Superconductivity*, vol. 33, no. 5, pp. 1–4, 2023.

[3] V. Chouhan, T. Ring, E. Viklund, and G. Wu, "Electropolishing Study on Nitrogen-Doped Niobium Surface," in *Proc. 21th Int. Conf. RF Supercond. (SRF'23)*, (Grand Rapids, MI, USA), ser. International Conference on RF Superconductivity, JACoW Publishing, Geneva, Switzerland, Sep. 2023, WEIXA05, pp. 641–645, ISBN: 978-3-95450-234-9. DOI: 10.18429/JACoW-SRF2023-WEIXA05. [Online]. Available: https://jacow.org/srf2023/papers/weixa05.pdf.

[4] E. V. et al., "Mechanical polishing of nb3sn thin-film cavities," English, (Venice, Italy), presented at IPAC'23, Venice, Italy, 2023, paper WEPA180, unpublished, May 2023. [Online]. Available: https://indico.jacow.org/event/41/contributions/1852.

[5] E. Viklund, L. Grassellino, S. Posen, T. Ring, and D. Seidman, "Studies on the Fundamental Mechanisms of Niobium Electropolishing," in *Proc. SRF'21*, (East Lansing, MI, USA), ser. International Conference on RF Superconductivity, JACoW Publishing, Geneva, Switzerland, Oct. 2022, SUPCAV016, pp. 50–52, ISBN: 978-3-95450-233-2. DOI: 10.18429/JACoW-SRF2021-SUPCAV016. [Online]. Available: https://jacow.org/srf2021/papers/supcav016.pdf.