

Podcast: A Milestone in Laser-Plasma Acceleration

Researchers from the Berkeley Lab Laser Accelerator Center talk about their latest results on a laser-based particle-acceleration technique that could lead to cheaper and more compact x-ray sources and particle accelerators.

By **Julie Gould** and **Matteo Rini**

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In this episode of *This is Physics*, podcast host Julie Gould and the *Physics Magazine* Editor speak with the authors of work highlighted in the magazine (see [Viewpoint: Electrons Channel Surf to Ultrahigh Energies](#)) [1]. The researchers, working with the Berkeley Lab Laser Accelerator Center (BELLA), share sounds and experiences from their laboratory, explain how they achieved a new laser-acceleration milestone, and discuss their plans for the future.

Podcast host Julie Gould and *Physics Magazine* Editor Matteo Rini speak with **Alexander Picksley** and **Joshua Stackhouse** of Lawrence Berkeley National Laboratory in California.

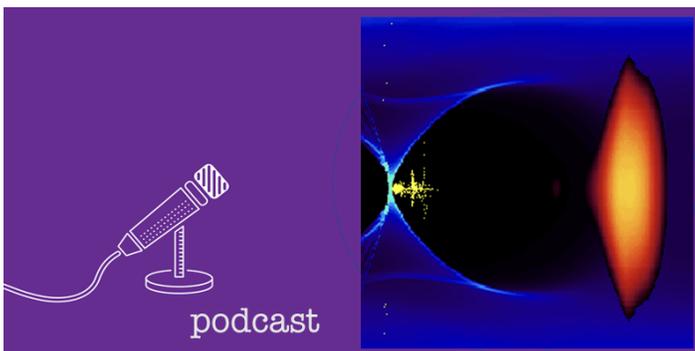
Music credit: *Lunga* by Sofia Ribeiro. Sofia is a singer, composer, and educator from Portugal. She taught at Bobby McFerrin's CircleSongSchool and was an artist in residence at Carnegie Hall in New York.

Julie Gould is a freelance science journalist and podcast producer based in London.

Matteo Rini is the Editor of *Physics Magazine*.

REFERENCES

1. A. Picksley *et al.*, "Matched guiding and controlled injection in dark-current-free, 10-GeV-class, channel-guided laser-plasma accelerators," *Phys. Rev. Lett.* **133**, 255001 (2024).



Credit: APS/Alan Stonebraker