



FULL SPATIO-TEMPORAL CHARACTERISATION OF YOUR
ULTRAFAST LASER AMPLIFIER

ICE

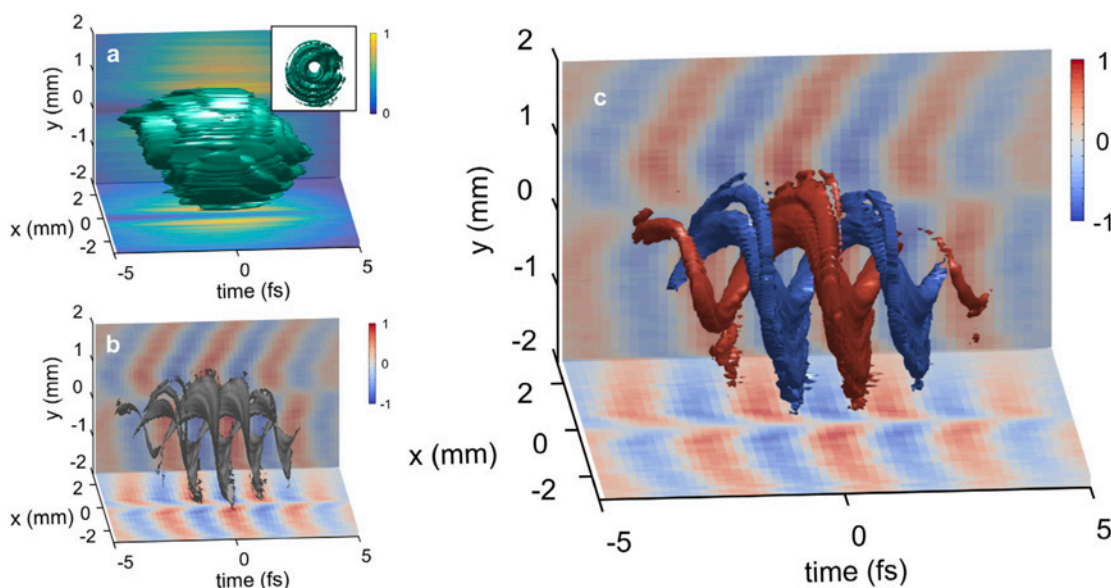


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Discover Sphere ICE, the innovative solution for complete spatiotemporal characterization of femtosecond laser pulses. Engineered for speed and precision, Sphere ICE provides high-resolution measurements that offer an intuitive and direct visualization of laser pulses across the spatial, frequency, and temporal dimensions. It expertly reveals spatiotemporal couplings, distortions, and intricate structures born from complex or customized phases.



Three dimensional reconstruction of a sub-two-cycle vortex beam. (a) Intensity profile in space and time obtained by taking the square of the absolute field. The plot shows an isosurface set at half the peak intensity. The inset shows the same surface from a viewpoint along the propagation direction, evidencing the phase singularity (dimensions of inset plot are 4 mm x 4 mm). (b) Isosurface set at 0 of the real part of the complex field. For clarity, only regions where the intensity is higher than 0.4 times the peak intensity are shown. (c) Isosurfaces of the real part of the field, set at 0.7 (red) and -0.7 (blue) of the peak field.
<https://doi.org/10.1364/OL.39.005142> - <https://doi.org/10.1080/09500340.2016.1257751>

KEY FEATURES

- Frequency-resolved intensity profile and wavefront
- Spatially resolved spectrum
- Spatio-temporal couplings

TECHNICAL SPECIFICATIONS	ICE
Wavelength range	500-1000 nm
Pulse duration (transform limited)	3 fs to 30 fs
Repetition rate	>10 Hz
Input polarization	Linear
Input aperture diameter	12 mm
Input power	1 mW
Dimensions (WxLxH)	300 x 300 x 100 mm



Contact us to discuss customized solutions for different wavelength ranges, chirp ranges, input apertures, and more