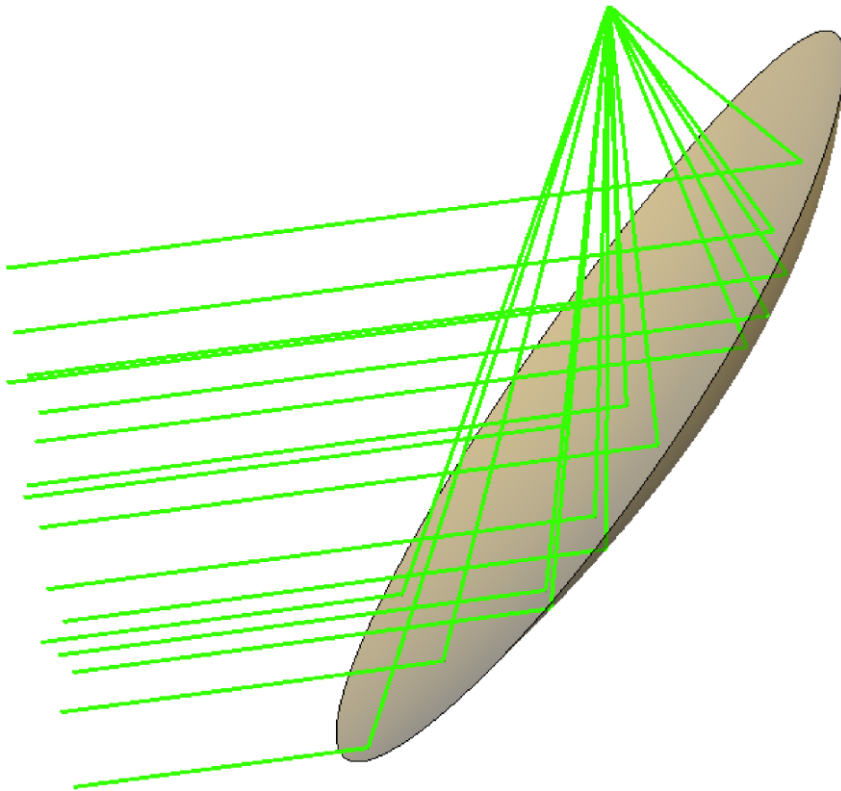


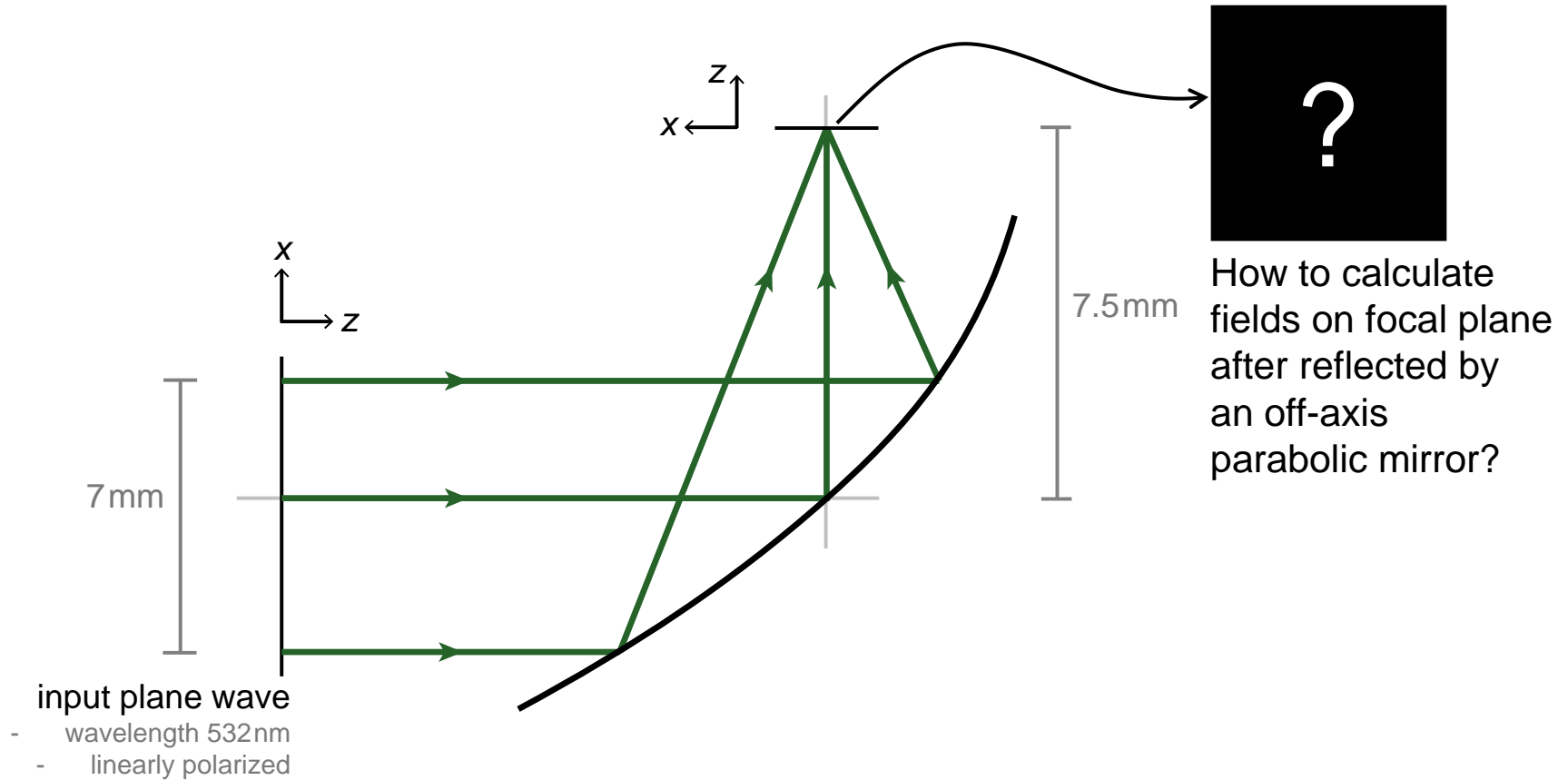
High-NA Focusing by Off-Axis Parabolic Mirror

Abstract

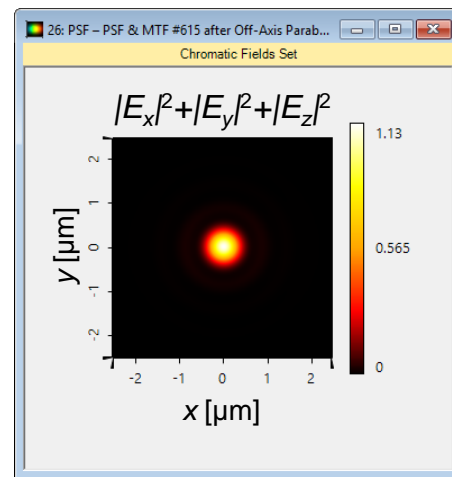
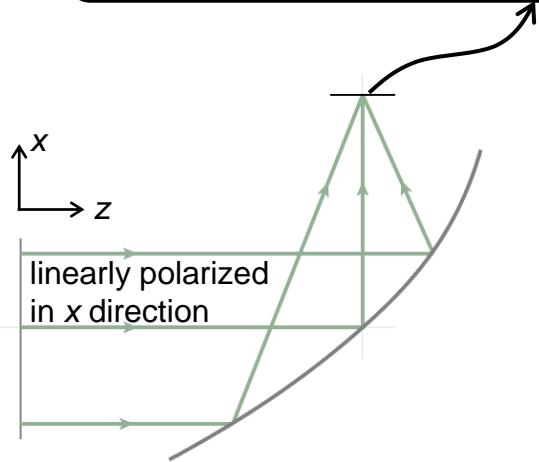
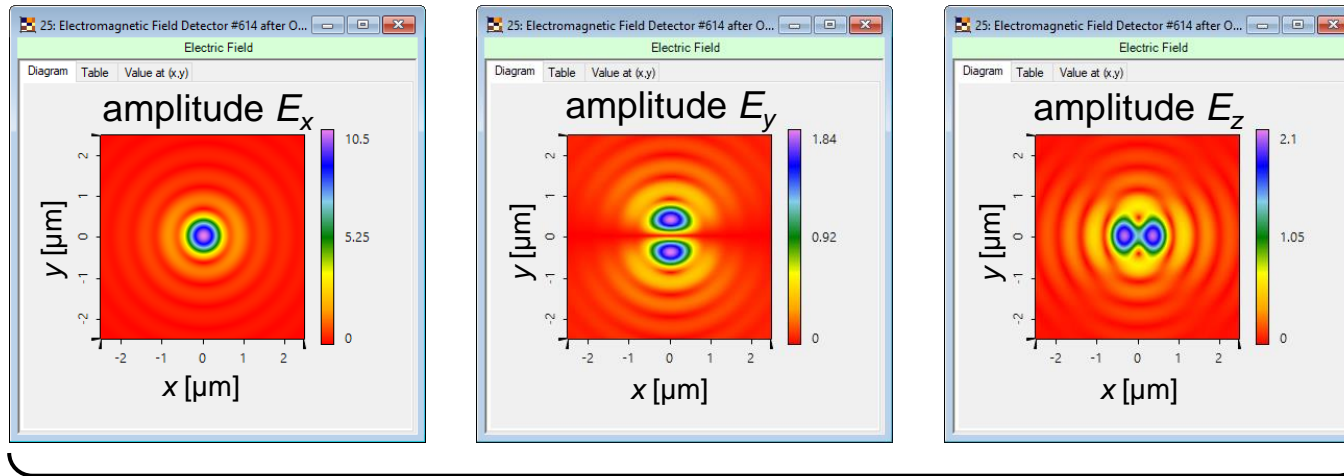


In high-NA focusing situations, the vectorial nature of light starts to play a role. To demonstrate such effects, a high-NA parabolic mirror is used to focused input plane wave with linear polarizations in different directions. By using the fast-physical-optics simulation techniques in VirtualLab, the fields in the focal plane can be easily examined and a clear difference between the focal spots due to different input polarizations can be found.

Modeling Task



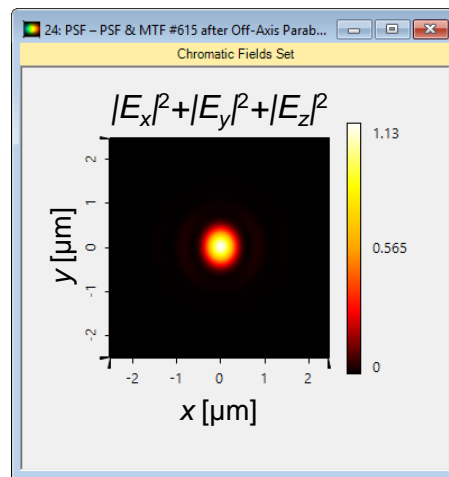
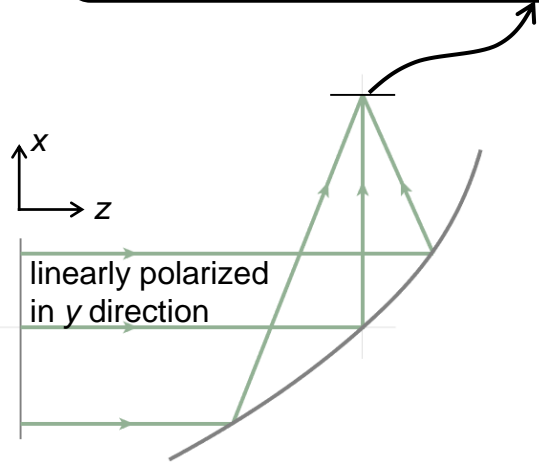
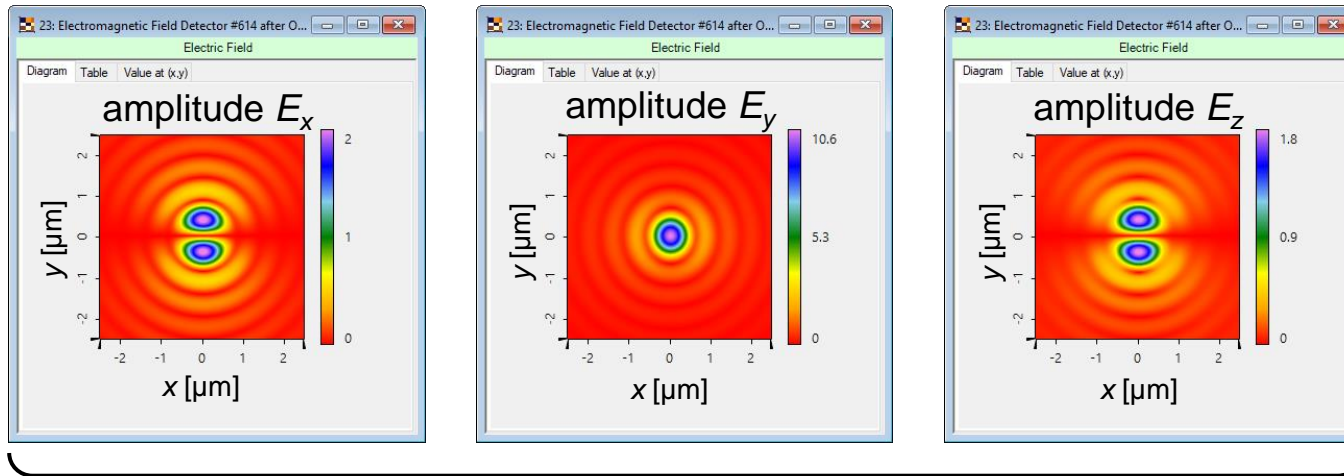
Results



Fully vectorial electromagnetic field simulation takes less than 3 seconds.

FWHM (x)	FWHM (y)
571.3nm	565.8nm

Results



FWHM (x)	FWHM (y)
534.1 nm	607.9 nm

Document Information

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VL version used for simulations	7.0.3.4
category	Technology Use Case
