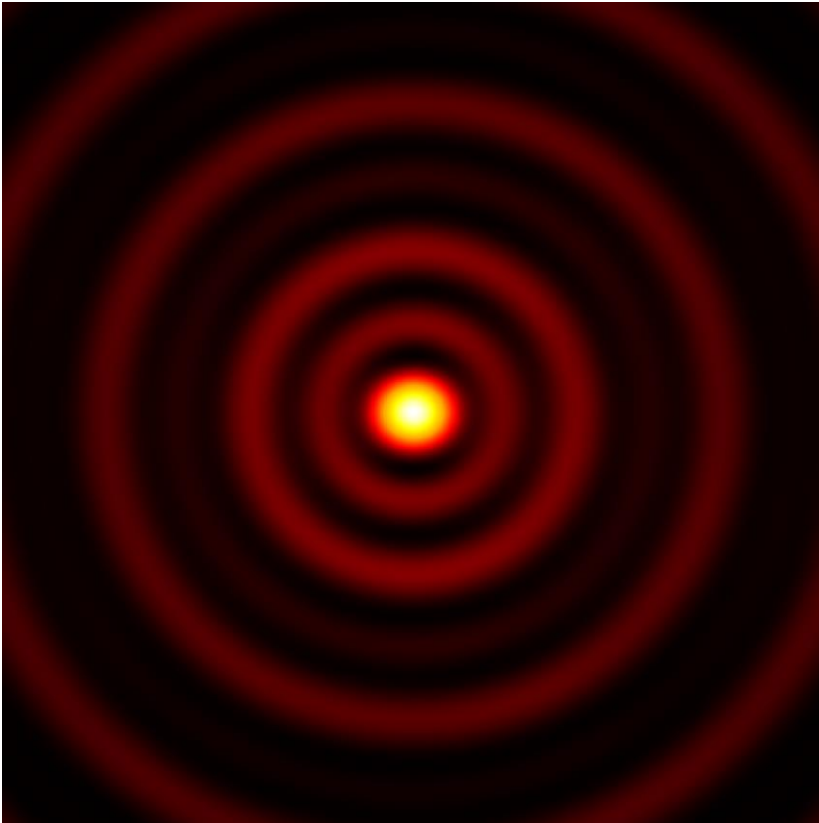


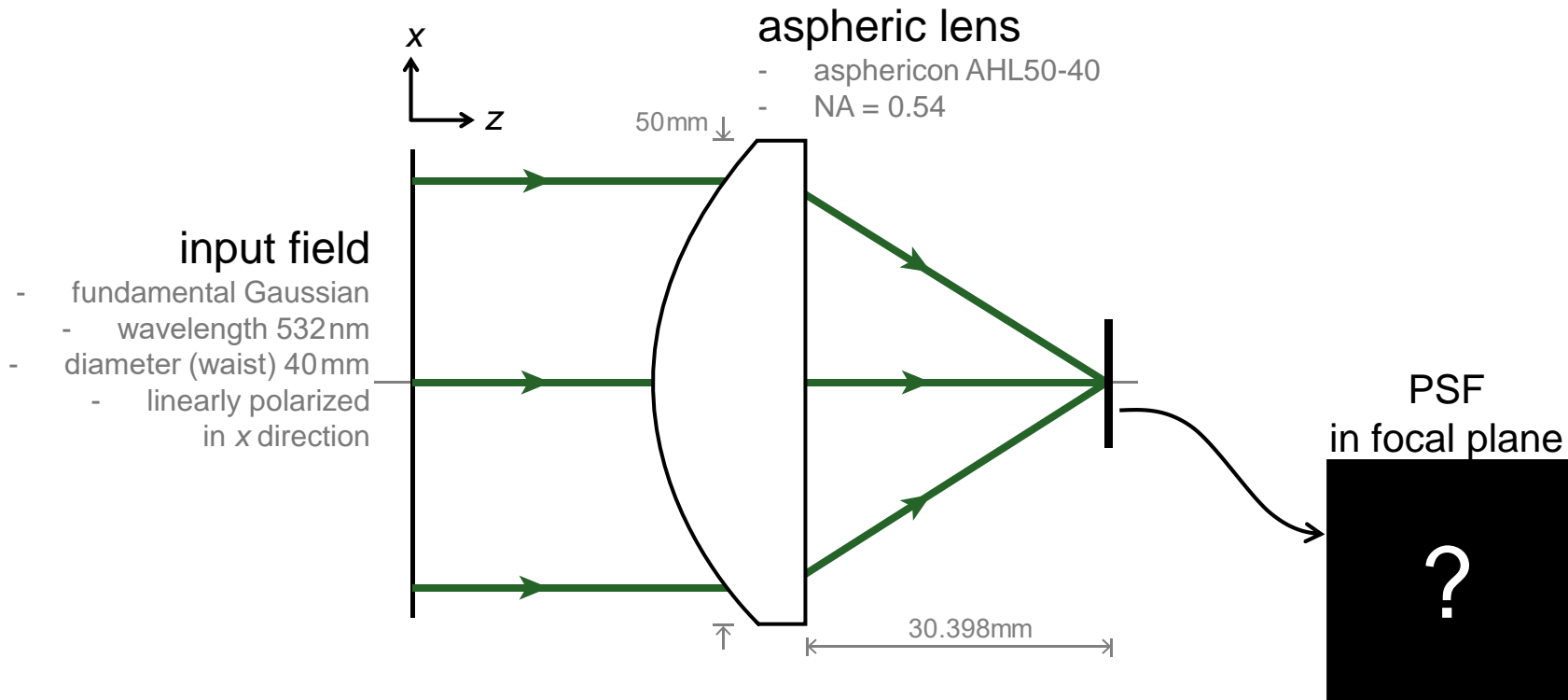
# **Advanced PSF Calculation in a High-NA Lens System**

# Abstract

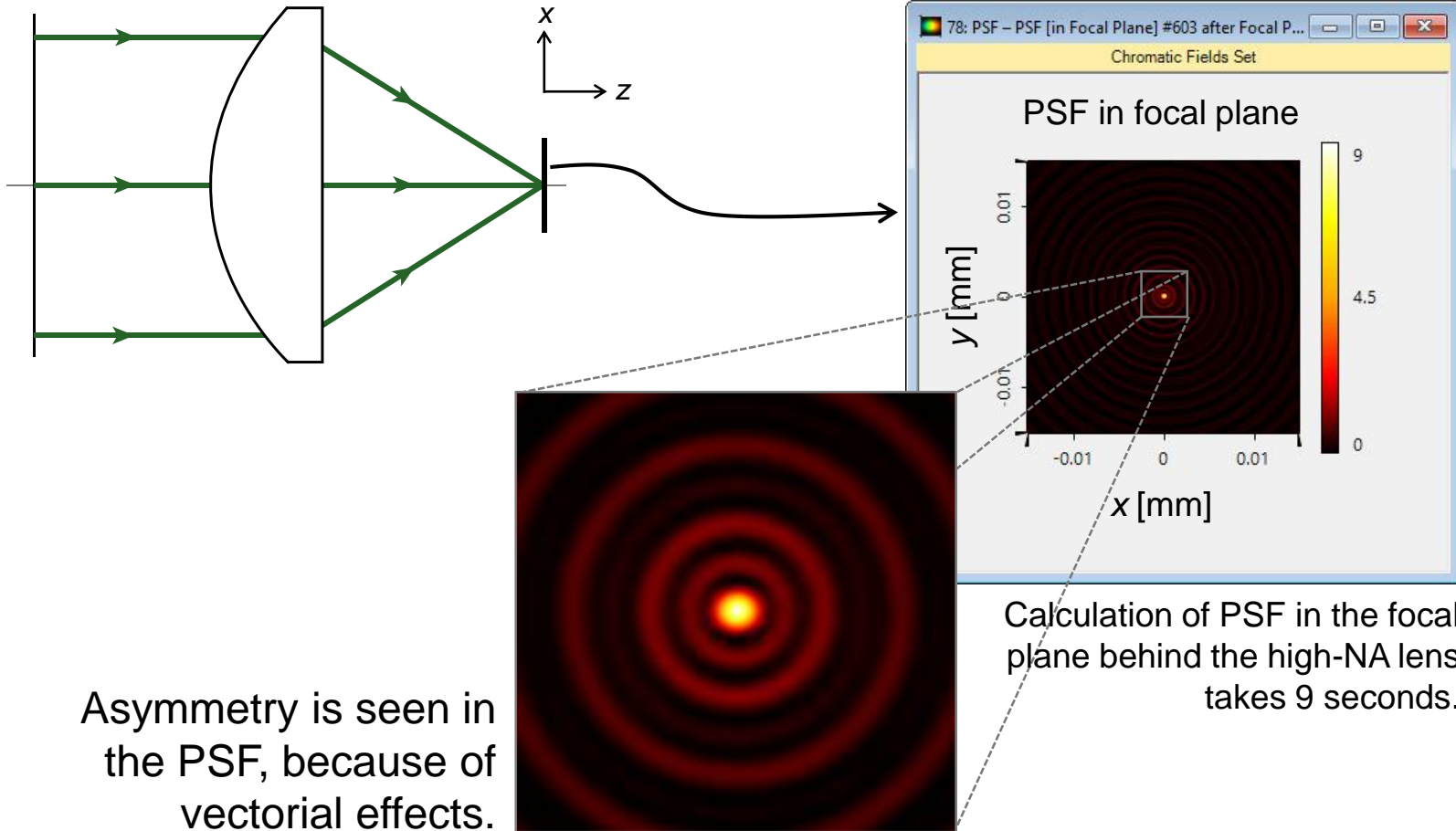


It is known that the vectorial nature of light plays a non-negligible role in high-NA focusing situations. In this example, focusing of a linearly polarized Gaussian beam by a high-NA aspheric lens is presented, and the asymmetric PSF in the focal plane is shown. By examining the electromagnetic field components in the focal plane, it can be found that the asymmetry is caused by a relatively strong  $E_z$  component.

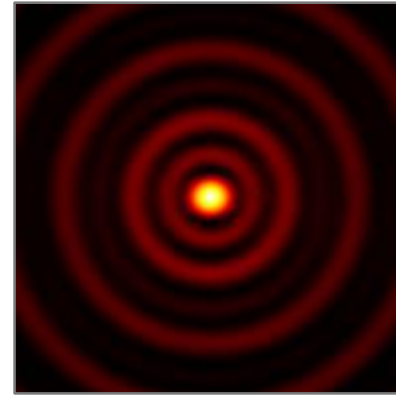
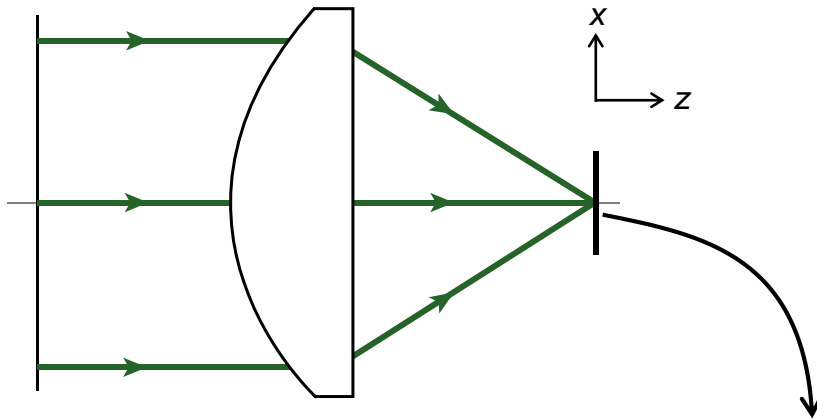
# Modeling Task



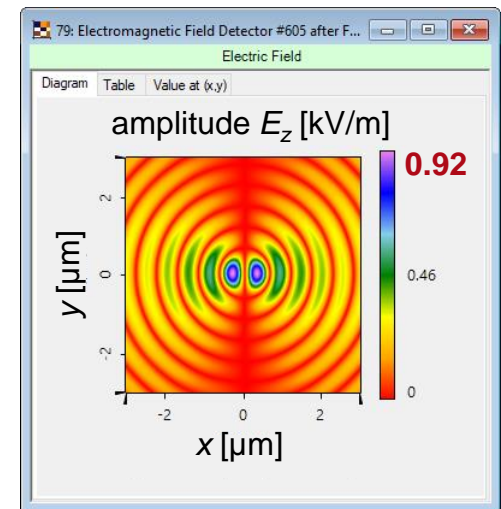
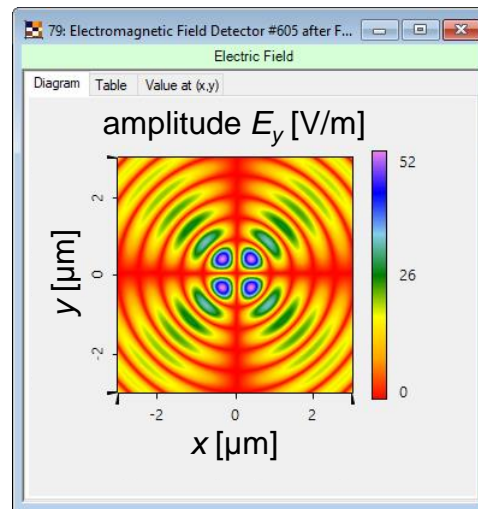
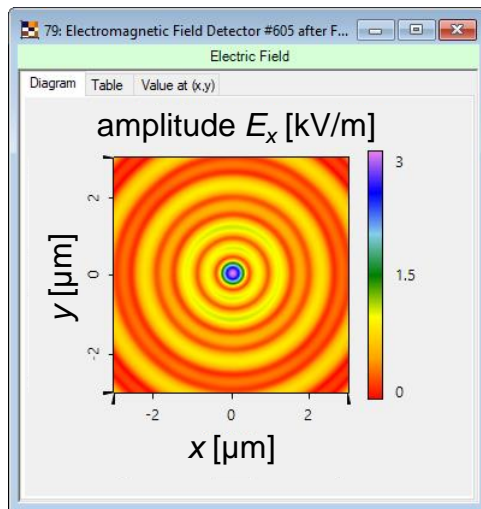
# Results



# Results



Asymmetry in PSF is due to the relatively strong  $E_z$  component.



# Document Information

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VL version used for simulations	7.3.1.5
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