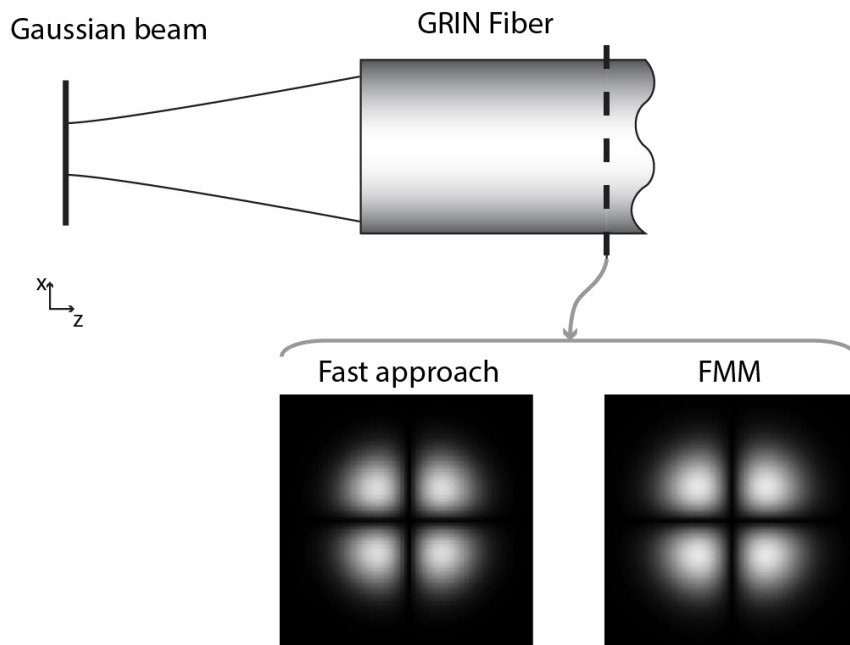


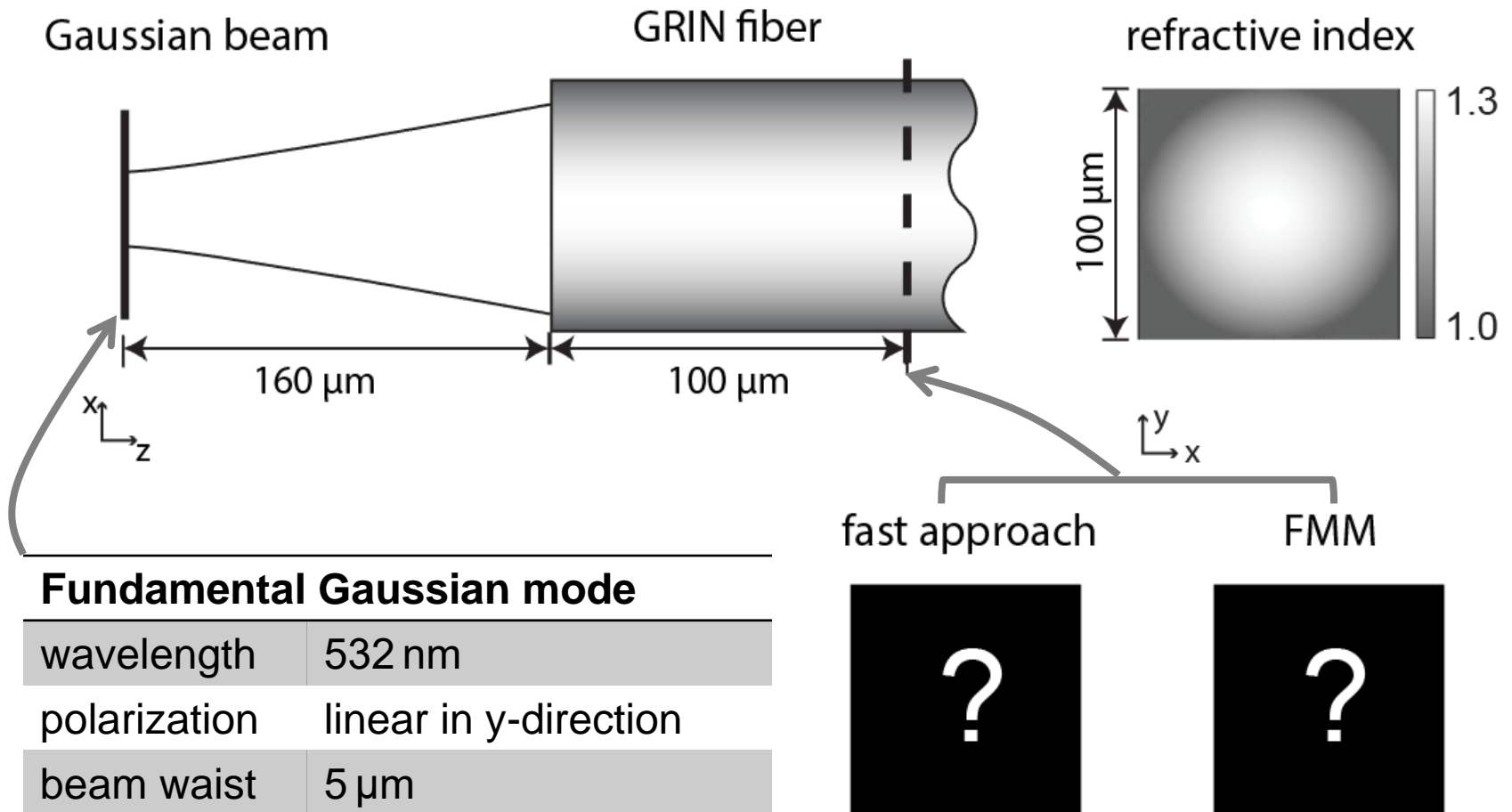
Modeling of Graded-Index (GRIN) Multimode Fiber

Abstract



Multimode fibers made out of graded-index media are widely used in optical applications. To simulate light propagating through the fiber, VirtualLab Fusion implements an approach, which solves Maxwell equation in a fast manner and includes polarization crosstalk effect. The validity and advantages of the fast approach is shown by comparing with the result from the rigorous Fourier modal method (FMM) with perfectly matched layers (PMLs). This example is published in [H. Zhong, J. Opt. Soc. Am. A **35**].

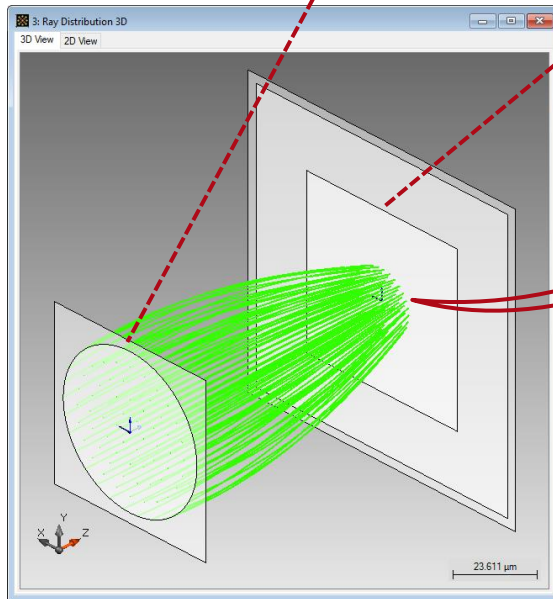
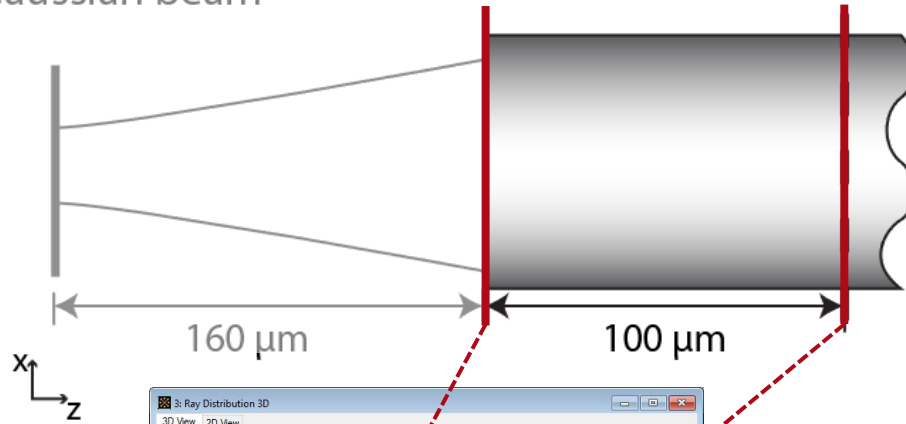
Modeling Task



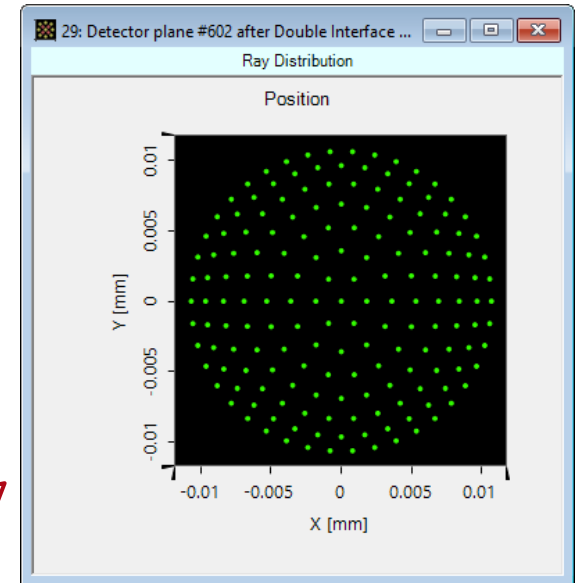
Results: Rays

Gaussian beam

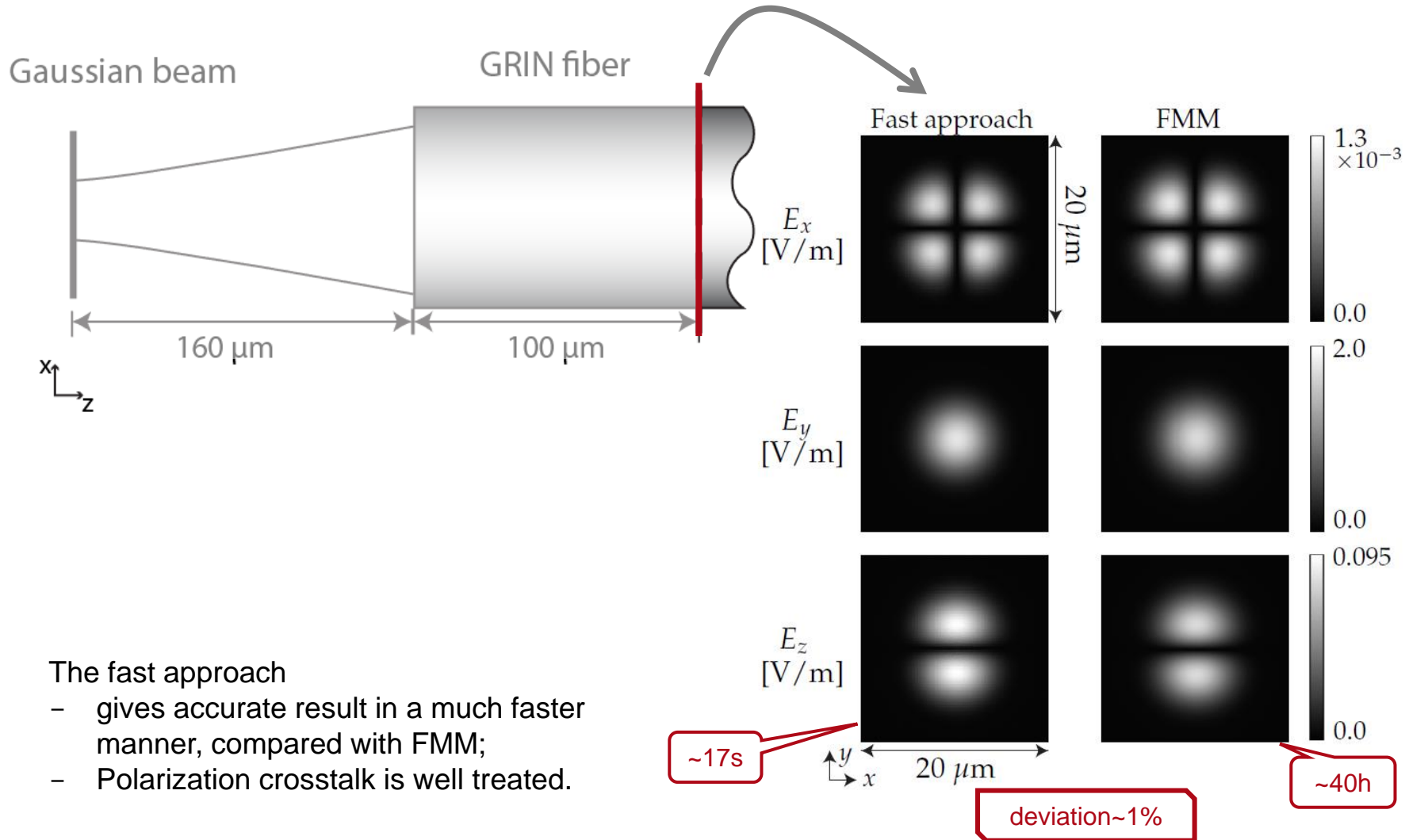
GRIN fiber



dot diagram



Results: Fields



Document Information

title	Modeling of Graded-Index (GRIN) Multimode Fiber
version	1.0
VL version used for simulations	7.0.3.4
category	Application Use Case
