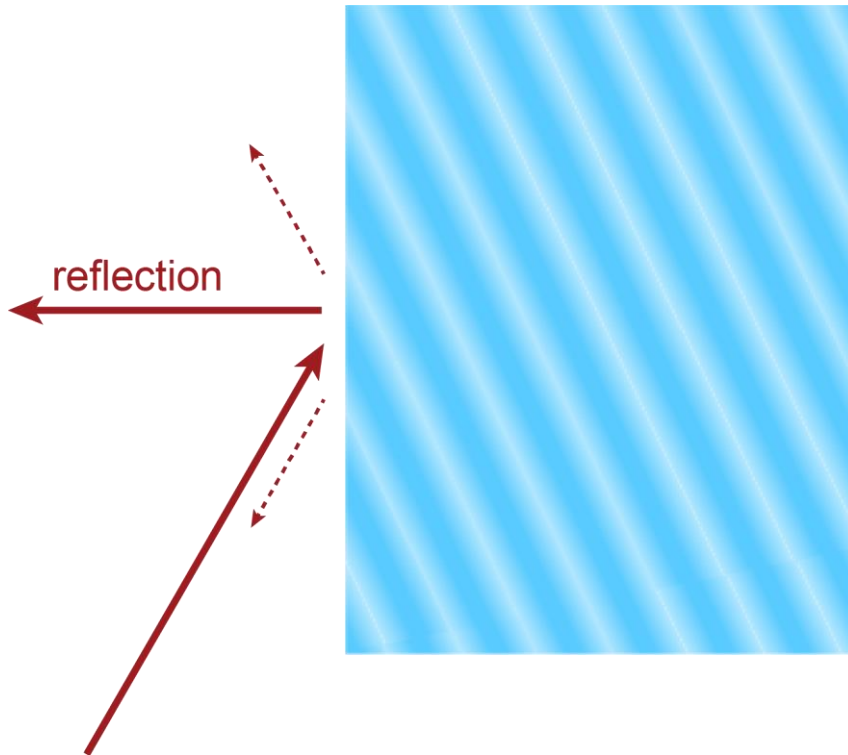


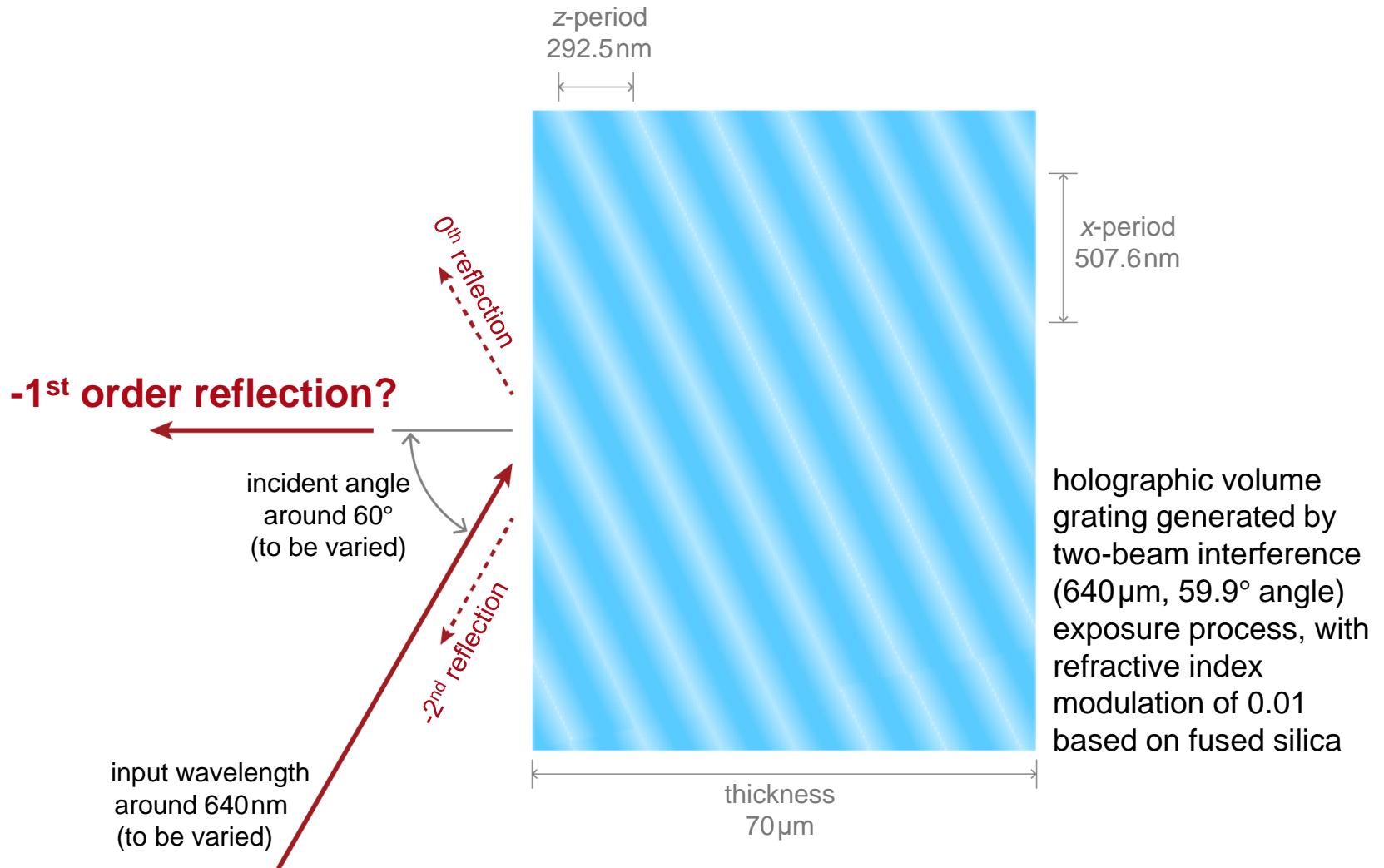
Rigorous Simulation of Holographic Generated Volume Grating

Abstract



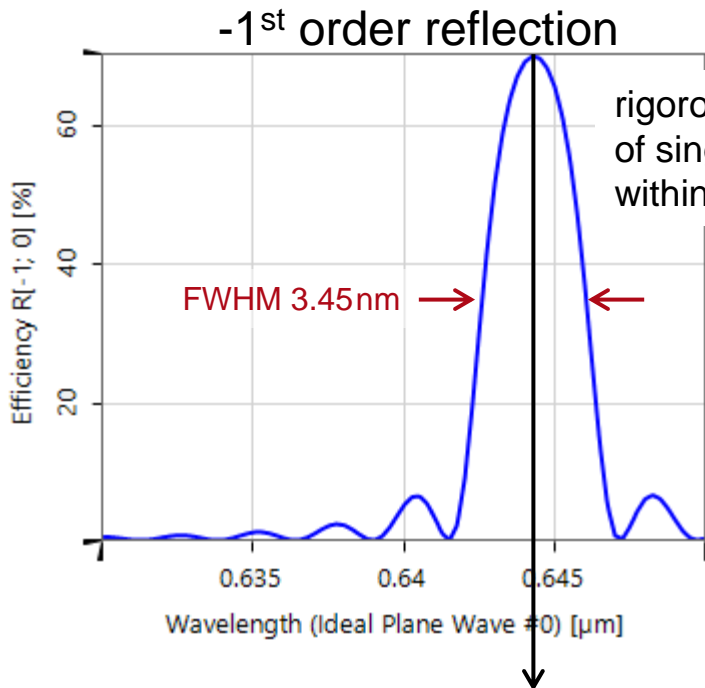
Holographic generated volume gratings, with a thickness much larger than the wavelength, often shows a narrow bandwidth around particular wavelength and angle. Following the two-beam interference exposure process, a volume grating inside fused silica is generated and simulated with the rigorous Fourier modal method (FMM) in VirtualLab. Both the spectral and angular dependent reflection property of the grating are analyzed.

Modeling Task

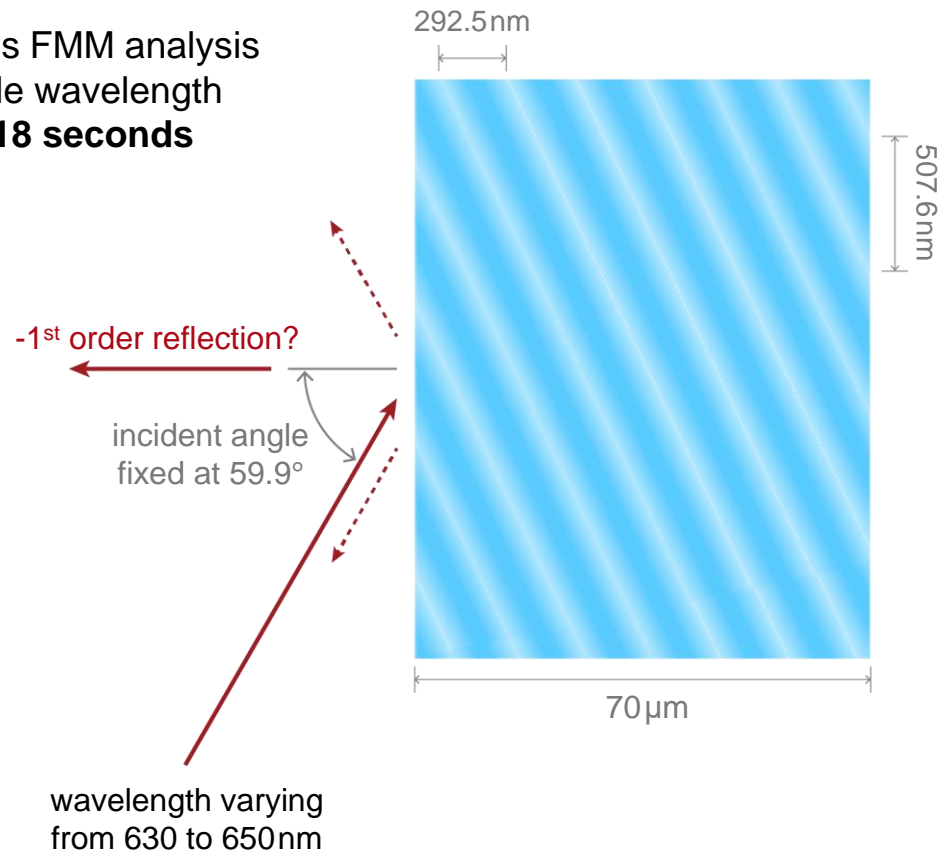


Results

- Wavelength scanning

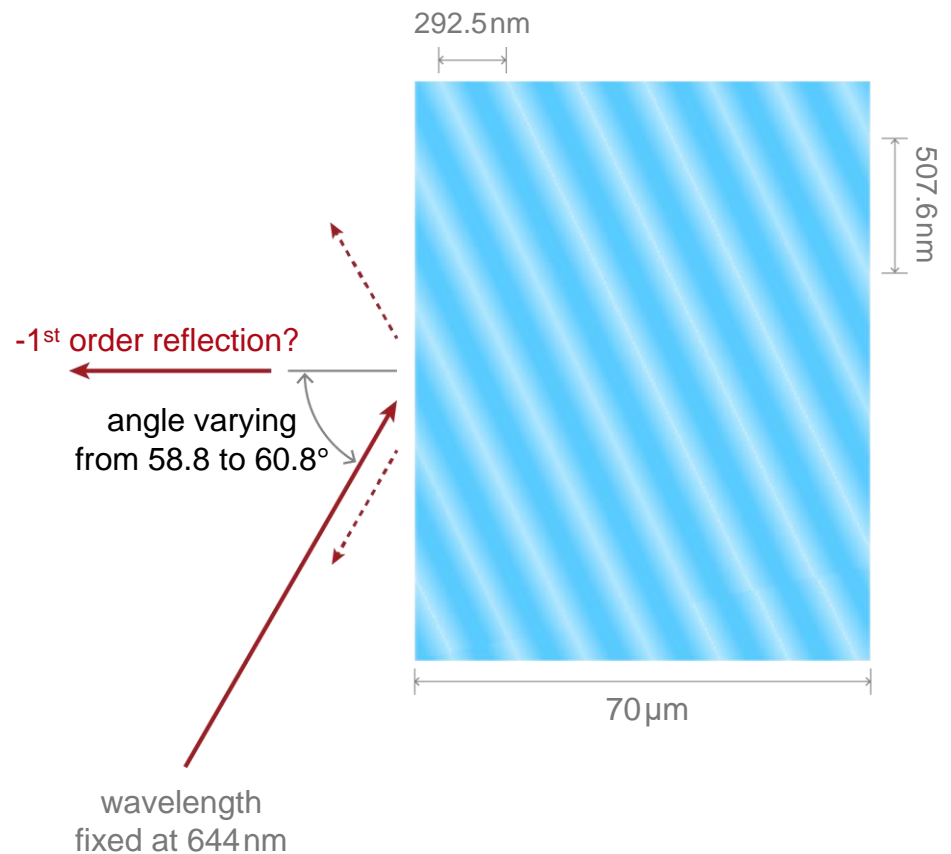
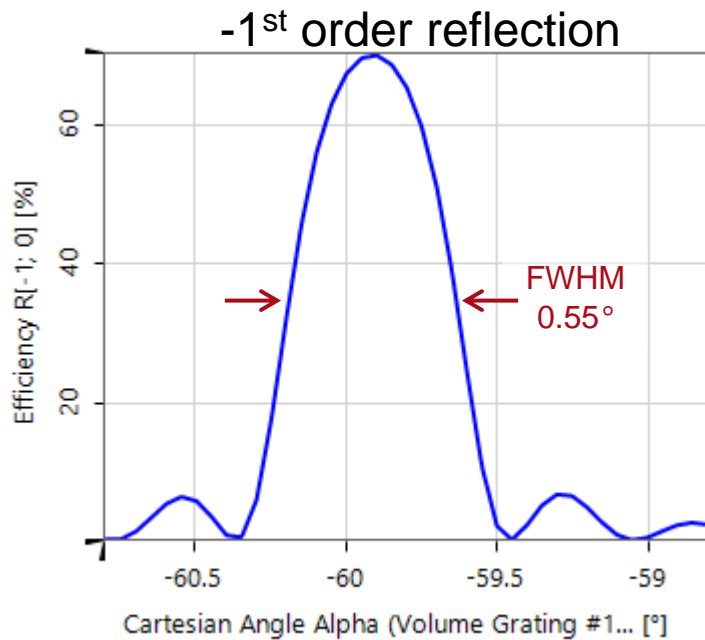


shift of wavelength dependent reflection due to locally increased effective refraction index



Results

- Angle scanning



Document Information

title	Rigorous Simulation of Holographic Generated Volume Grating
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