

## Webinar

VirtualLab Fusion Applications, Technology & Workflows

# VirtualLab Fusion 2020.1 Release Webinar

**Date:** 8 July 2020

**Times:** 10:00 – 11:00 and 17:00 – 18:00 (CET)

**Registration:** Please register by clicking [here](#).

We are proud to present a new version of VirtualLab Fusion, in which we bring the connecting field solvers technology to the next level. We completely do away with the tendency that exists of only considering diffraction effects at the exit pupil of the system, in the process enabling the analysis of laser systems, cascaded diffraction, vignetting, 4f setups as well as of any combination of gratings, microstructures, diffusers, and diffractive and metalenses with conventional and freeform lenses.

Our new components for gratings, plane interfaces and stratified media have the full advantage of a k-domain treatment. A catalog of innovative Fourier transform algorithms allows for a fast back-and-forth between the domains based on a fully automatic, but customizable, decision-making process. A unique hybrid sampling strategy keeps computational effort in check. We have also added a local linear grating solver for diffractive lenses and HOEs. And even more new features!

Some of the examples you can expect to see live in the new version of VirtualLab Fusion in our online release event:

- Simulation of Focusing with Cascaded Apertures
- Analysis and Design of Afocal Systems for Laser Guide Stars
- Pinhole Modeling in a Low-Fresnel-Number System
- Goos-Hänchen Shift

