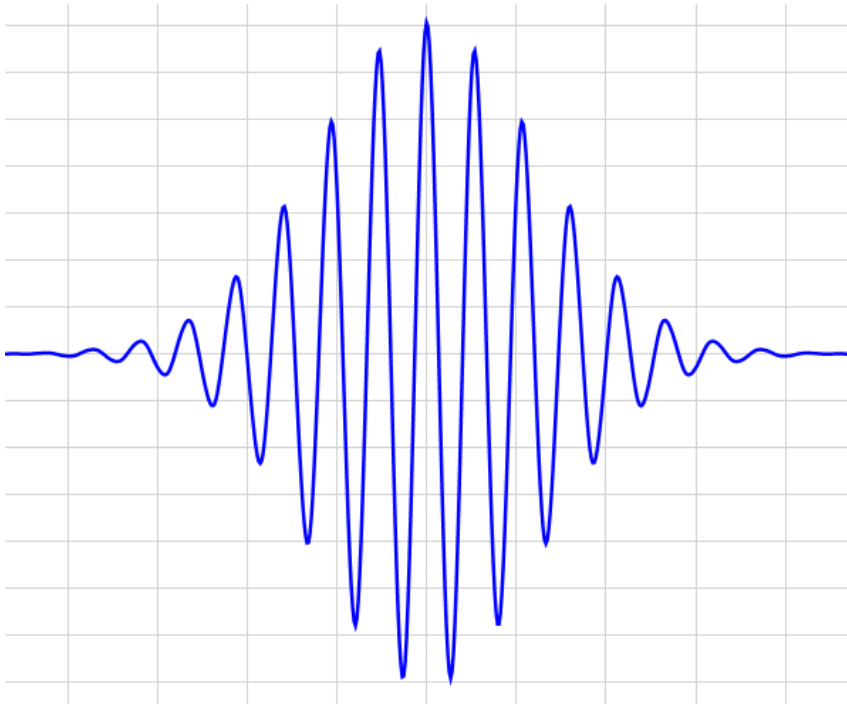


# Femtosecond Pulse Propagation through Dispersive Seawater

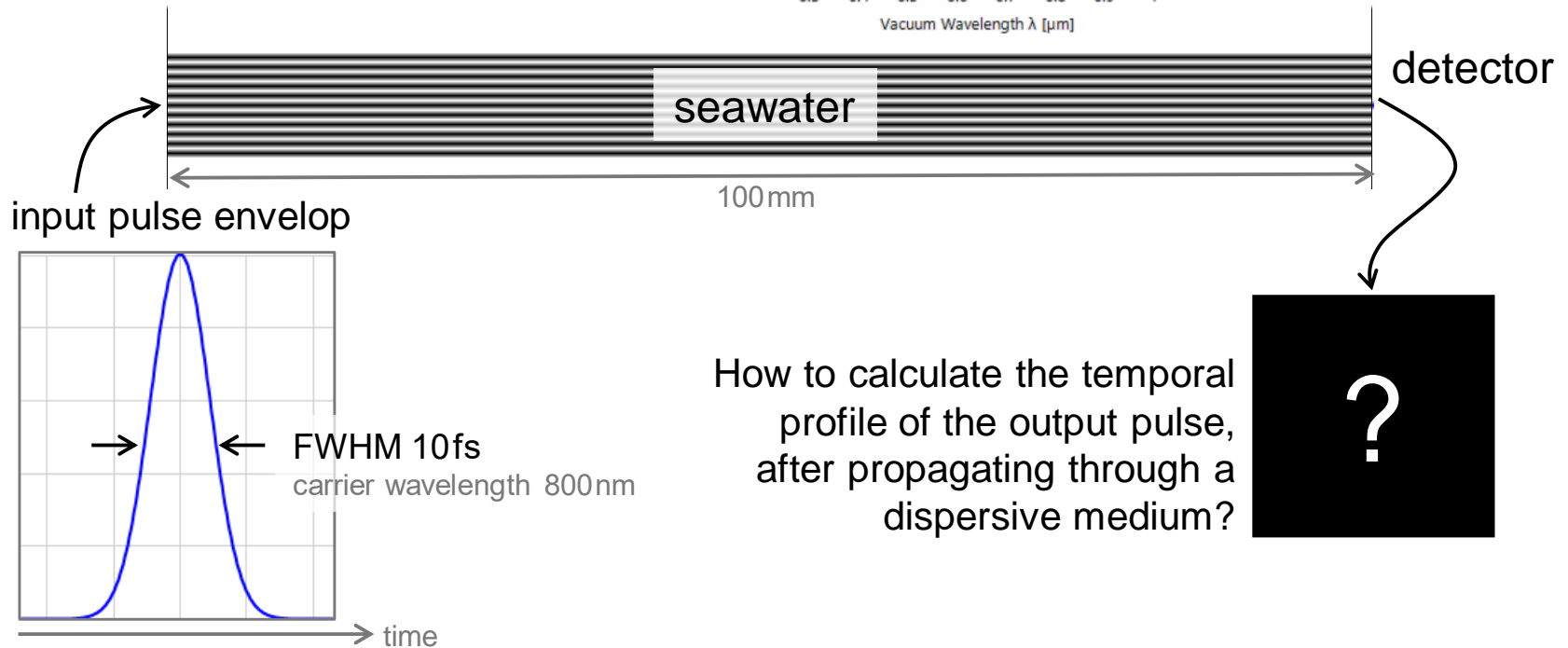
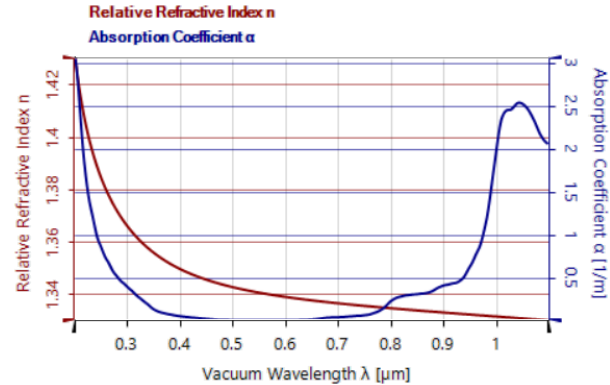
# Abstract



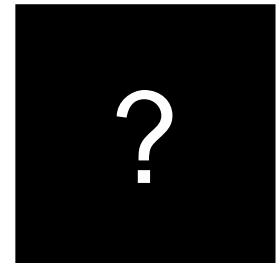
Ultrashort pulses with time duration of the order of femtosecond, have broad spectral band. They enable many applications due to their short time duration. But on the other hand, it is not trivial to maintain the ultrashort time duration after propagating through dispersive materials. As an example, the propagation of a 5fs pulse through seawater is studied in VirtualLab. The broadening of the pulse and the change in its temporal profile are shown.

# Modeling Task

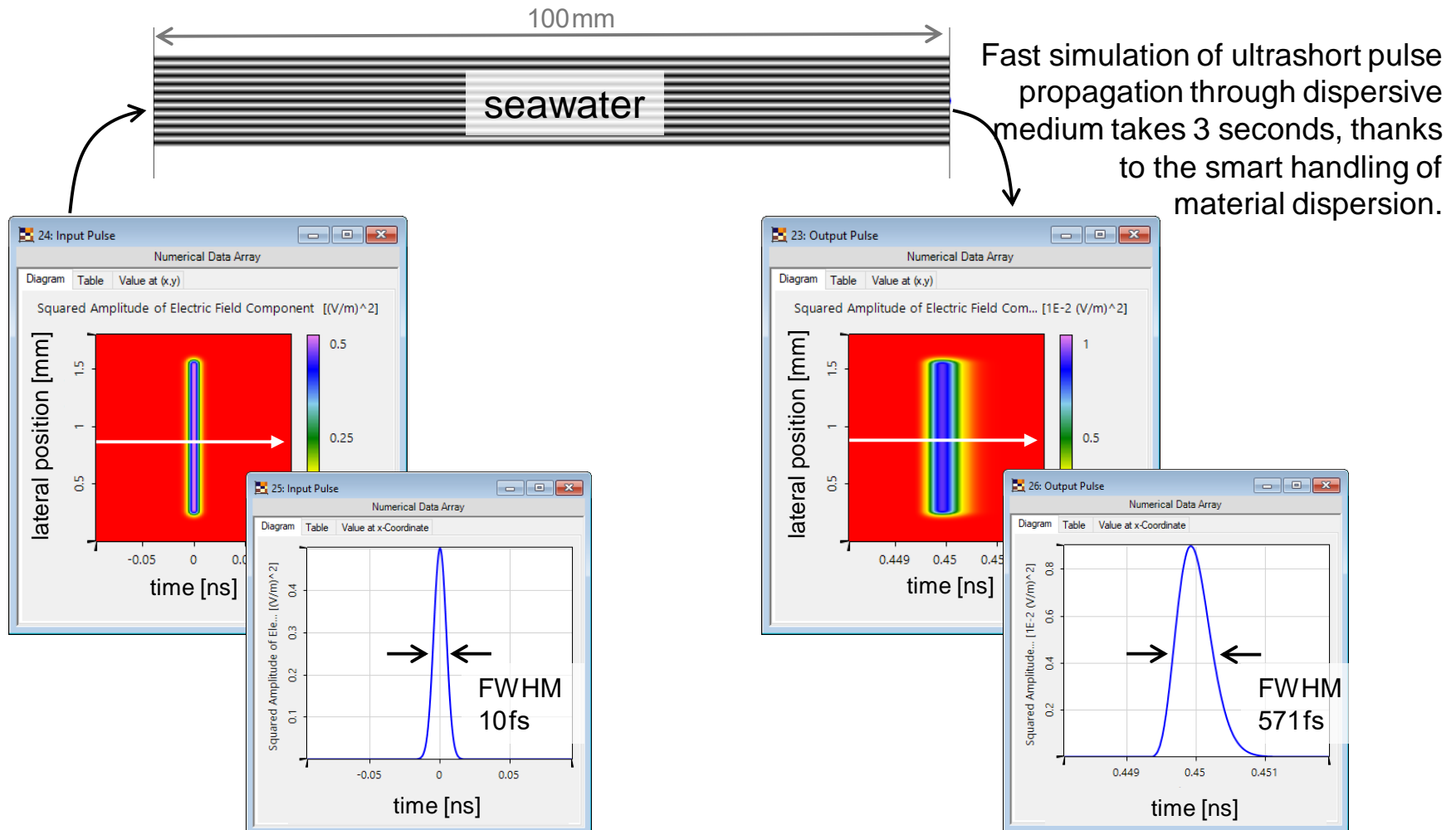
dispersion property  
of the embedding  
medium (seawater)



How to calculate the temporal  
profile of the output pulse,  
after propagating through a  
dispersive medium?



# Results



# Document Information

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title	Femto-second Pulse Propagation through Dispersive Seawater
version	1.0
VL version used for simulations	7.3.1.5
category	Application Use Case

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