

# GUI basics 2

Interference functions, roughness and graded layers

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# Overview

- 1 Interference functions
- 2 Roughness
- 3 Graded layer approximation

# Interference functions

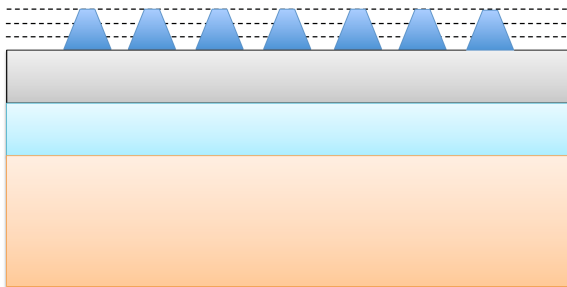
See Jupyter notebook:  
`interference_functions.ipynb`

# Rough interfaces

See Jupyter notebook:  
`roughness.ipynb`

## Graded layer approximation

- If the density of the particles is quite high, their influence on the plane wave solutions cannot be neglected.
- In this case, we can use the graded layer approach, where we slice the layers into a fixed number of sublayers and use an average scattering length density in each slice.



## Graded layer method