

# GUI basics 2

Interference functions, roughness and graded layers

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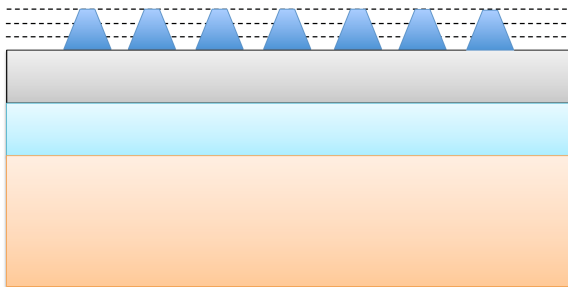
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# Overview

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

# 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

# Interference functions

See Jupyter notebook:  
`interference_functions.ipynb`

# Rough interfaces

See Jupyter notebook:  
`roughness.ipynb`