Asymptotically consistent discretization(s) of the Lippmann–Schwinger equation

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Abstract

In this lecture, we will discuss asymptotically consistent discretizations of the Lippmann–Schwinger equations. In other words, we won't enforce *exact* evaluation of the continuous variational problem over the discretization space. This additional flexibility will allow to derive more efficient numerical schemes.

The following topics will be discussed

- Discussion of the consistent discretization
- On asymptotically consistent discretizations
- Asymptotically consistent discretizations of the microstructure
- Asymptotically consistent discretizations of the Green operator
- Comparison of some discretizations

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