DD-LOD

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DD-LOD is a multiscale finite element method for problems with rough coefficients that is based on a domain decomposition approach to the localized orthogonal decomposition methodology. I will present the construction and analysis of DD-LOD for elliptic boundary value problems with rough coefficients that only require basic knowledge of finite element methods, domain decomposition methods and numerical linear algebra. An application to elliptic optimal control problems will also be discussed.

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