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Nestor Guillen and **Russell Schwab*** (rschwab@math.msu.edu), Department of Mathematics, Michigan State University, 619 Red Cedar Rd, East Lansing, MI 48824. *Neumann homogenization via integro-differential methods.*

We study the homogenization of fully nonlinear elliptic equations with oscillatory Neumann data in half-space type domains. We employ new methods to prove the averaging, by recasting the original boundary equation as a global interior homogenization problem involving an integro-differential operator on the boundary itself. This is done by using the Dirichlet-to-Neumann mapping for the fully nonlinear equation in the interior of the domain. This is joint work with Nestor Guillen. (Received August 31, 2015)