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Peter Kuchment* (kuchment@twsu.edu), Mathematics Department, Wichita State University, 1845 N. Fairmount, Wichita, KS 67260-0033, and **Yehuda Pinchover** (pincho@techunix.technion.ac.il), Mathematics Department, Technion - Israel Institute of Technology, 32000 Haifa, Israel. *An integral representation of solutions of elliptic periodic PDE.*

Integral representations for certain classes of exponentially growing solutions of second order periodic elliptic equations are obtained that are analogs of those previously discovered by S. Agmon, L. Caffarelli, L. Ehrenpreis, S. Helgason, W. Littman, and other authors for solutions of constant coefficient PDEs, in particular the Helmholtz equation. The representation is done in terms of hyperfunctions on the (convex analytic) variety of quasimomenta of positive solutions. (Received August 25, 2000)