1113-35-203　　　　　　**Minh Tuan Kha***, Department of Mathematics, Texas A&M University, 3368 TAMU, College Station, TX 77843, and **Peter Kuchment** and **Andrew Raich**. *Green's function asymptotics near the internal edges of spectra of periodic elliptic operators. Spectral gap interior.* Preliminary report.

Precise asymptotics known for the Green function of the Laplacian have found their analogs for bounded below periodic elliptic operators of the second-order below the bottom of the spectrum. Due to the band-gap structure of the spectra of such operators, the question arises whether similar results can be obtained near the edges of spectral gaps. In this talk, we will discuss the Green's function asymptotics for "generic" periodic elliptic operators of second-order in dimension $d \geq 2$, when the gap edge occurs at a high symmetry point of the Brillouin zone. (Received August 21, 2015)

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