1011-35-348Tadeusz Iwaniec* (tiwaniec@syr.edu), Department of Mathematics, Syracuse Univ., 215
Carnegie Building, Syracuse, NY 13244. On G-Compactness of Beltrami operators.

I will report on a recent work with B. Bojarski, L. D'Onofrio, F, Giannetti, L. Kovalev, G. Moscariello and C. Sbordone. Using quasiconformal mappings we develop a fairly general method of constructing the G-limits of some elliptic differential operators in the complex plane. While the class of operators which are linear over the field of complex numbers is closed under G-convergence the situation is much different when passing to a G-limit of other types of the Beltrami operators (linear over the field of real numbers). Examples of peculiar G-limits, and of other interests, will be presented. (Received August 30, 2005)