

Dirichlet forms on metric measure spaces as Mosco limits of Korevaar-Schoen energies

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Abstract. This paper establishes sufficient general conditions for the existence of Mosco limits of Korevaar-Schoen L^2 -energies, first in the context of Cheeger spaces and then in the context of fractal-like spaces with walk-dimension greater than two. Among other ingredients, we employ a new Rellich-Kondrachov-type theorem for Korevaar-Schoen-Sobolev spaces, which is of independent interest.

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