

# Selfadjoint realizations of the Laplacian on bounded Lipschitz domains

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In this talk we give a complete description of the selfadjoint realizations of the Laplacian on bounded Lipschitz domains with the help of Dirichlet and Neumann boundary conditions. One of the key difficulties is to establish the existence and the mapping properties of the Dirichlet and Neumann trace map on the domain of the maximal operator. We pay special attention to Robin type boundary conditions and we also discuss less standard realizations of the Laplacian, as e.g. the Krein-von Neumann extension and its spectral asymptotics. This talk is based on joint work with Fritz Gesztesy and Marius Mitrea.