Subordinacy theory on star-like graphs

Netanel Levi Hebrew University of Jerusalem netanel.levi@mail.huji.ac.il

The notion of subordinacy was introduced by Gilbert and Pearson, and it enables one to separate the singular and absolutely continuous parts of the spectrum of Schroedinger operators on the line via asymptotic properties of solutions to the eigenvalue equation. Informally speaking, a solution is called subordinate if it decays faster than any other linearly independent solution. We present a generalization of the Gilbert-Pearson subordinacy theory to Schroedinger operators on star-like graphs, which are graphs that consist of a compact component C, to which a finite number of half-lines are attached. We use our result to draw conclusions on the multiplicity of the singular spectrum of such operators.