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Spectra of composition operators on the Dirichlet space induced by full-maps of the disk.
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Summary: Motivated by the study of composition operators induced by inner functions acting on the Hardy space, we present spectral results for composition operators induced by a class of full-maps of the disk when acting on the Dirichlet space. To do this, we first investigate the norm, essential norm, spectral radius, and essential spectral radius of a composition operator when the inducing map has bounded valence. Our spectral results consider composition operators induced by univalent full-maps, monomials, finite Blaschke products, and general full-maps of the disk with valence that is constant almost everywhere.

MSC:
47Exx Special classes of linear operators
47Axx General theory of linear operators
46Exx Linear function spaces and their duals

Keywords:
composition operator; spectrum; essential spectrum; Dirichlet space

Full Text: DOI

References:
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