

J. Mashreghi, **Extending functions in the model subspaces of $H^2(\mathbf{R})$ to \mathbf{C}** , *Bull. Iran. Math. Soc.*, 28:1 (2002), 43-55.

Abstract

It is shown that each function f in a model subspace K_Θ of $H^2(\mathbf{R})$ can be extended to \mathbf{C} . The extension to the upper half plane is in $H^2(\mathbf{C}_+)$ and the extension to the lower half plane is in $\Theta H^2(\mathbf{C}_-)$. We also show that f is analytic at each point of the real line where Θ is analytic. Finally, we completely characterize K_Θ for $\Theta(x) = e^{i\sigma x}$ and for Θ being a meromorphic Blaschke product.