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**Richard Rochberg\*** ([rr@math.wustl.edu](mailto:rr@math.wustl.edu)), 6936 Cornell Ave., University City, MO 63130. *The Maximal Ideal Space of the Multiplier Algebra of the Dirichlet Space*. Preliminary report.

Let  $H^2$  and  $\mathcal{D}$  be the classical Hardy space and Dirichlet space,  $H^\infty = \mathcal{M}(H^2)$  and  $\mathcal{M}(\mathcal{D})$  their respective multiplier algebras, and  $\mathcal{MI}(H^\infty)$  and  $\mathcal{MI}(\mathcal{M}(\mathcal{D}))$  the maximal ideal spaces of those algebras.  $H^\infty$  and  $\mathcal{MI}(H^\infty)$  have been studied extensively, both because of their intrinsic interest and because of their intimate relationship to the operator theory of  $H^2$ .

Also, we now know that there are deep analogies which relate  $H^2$  and  $\mathcal{D}$ . Perhaps  $\mathcal{M}(\mathcal{D})$  and  $\mathcal{MI}(\mathcal{M}(\mathcal{D}))$  have rich structure that is, in some ways, similar to that of  $H^\infty$  and  $\mathcal{MI}(H^\infty)$ .

In this talk I will discuss some preliminary observations and questions related to this speculation. (Received August 28, 2012)