V. Havin and J. Mashreghi, **Admissible majorants for model subspaces of $H^2(\mathrm{R})$, Part II: fast winding of the generating inner function**, *Can. J. Math.*, 55 (2003), 1264–1301.

Abstract
This paper is a continuation of [1]. We consider the model subspaces $K_\Theta = H^2 \ominus \Theta\, H^2$ of the Hardy space H^2 generated by an inner function Θ in the upper half plane. Our main object is the class of admissible majorants for K_Θ, denoted by $\mathrm{Adm}\,\Theta$ and consisting of all functions ω defined on $\mathbf{R}$ such that there exists an $f \neq 0$, $f \in K_\Theta$ satisfying $|f(x)| \leq \omega(x)$ almost everywhere on $\mathbf{R}$. Firstly, using some simple Hilbert transform techniques, we obtain a general multiplier theorem applicable to any K_Θ generated by a meromorphic inner function. In contrast with [1], we consider the generating functions Θ such that the unit vector $\Theta(x)$ winds up fast as x grows from $-\infty$ to ∞. In particular, we consider $\Theta = B$ where B is a Blaschke product with "horizontal" zeros, i.e., almost uniformly distributed in a strip parallel to and separated from $\mathbf{R}$. It is shown, among other things, that for any such B, any even ω decreasing on $(0, \infty)$ with a finite logarithmic integral is in $\mathrm{Adm}\,B$ (unlike the "vertical" case treated in [1]), thus generalizing (with a new proof) a classical result related to $\mathrm{Adm}\,\exp(i\sigma z)$, $\sigma > 0$. Some oscillating ω's in $\mathrm{Adm}\,B$ are also described. Our theme is related to the Beurling–Malliavin multiplier theorem devoted to $\mathrm{Adm}\,\exp(i\sigma z)$, $\sigma > 0$, and to de Branges' space $\mathcal{H}(E)$.

[1] V. Havin and J. Mashreghi, **Admissible majorants for model subspaces of $H^2(\mathrm{R})$, Part I: slow winding of the generating inner function**, *Can. J. Math.*, to appear.