1023-46-1897 **Nadia J Gal*** (nadiagal@memphis.edu), Nadia Gal, Math. Dept. Universiy of Memphis, Memphis, TN 38111. *Isometries on A^{ϕ}.* Preliminary report.

Let $\mathcal{H}$ be a separable complex Hilbert space and Φ be a Young's function satisfying the Δ_2 condition. We define the space $A^{\Phi}(\mathcal{H})$ of all absolutely continuous functions $f : [0,1] \to \mathcal{H}$ such that $\frac{df}{dx}$ exist a.e. on $[0,1]$ and belongs to $L_{\Phi}([0,1], \mathcal{H})$. We characterize the form of the surjective isometries on $A^{\Phi}(\mathcal{H})$. In addition, we give the form of a hermitian operator on this space and the condition of isometric equivalence of two hermitian operators on $A^{\Phi}(\mathcal{H})$. (Received September 27, 2006)