1040-42-87 **oscar blasco*** (Oscar.Blasco@uv.es), 46100 Burjassot, Valencia, Spain. *On functions in the unit ballof vector-valued Hardy Spaces.*

Let X be a complex Banach space and let $H^2(\mathbb{D}, X)$ stand for the space of X-valued analytic functions in the unit disc such that $\sup_{0<r<1} \int_0^{2\pi} \|F(re^{it})\|^2 \frac{dt}{2\pi} < \infty$. It is shown that a function F belongs to the unit ball of $H^2(\mathbb{D}, X)$ if and only if there exist $f \in H^\infty(\mathbb{D}, X)$ and $\phi \in H^\infty(\mathbb{D})$ such that $\|f(z)\|^2 + |\phi(z)|^2 \leq 1$ and $F(z) = \frac{f(z)}{1 - z\phi(z)}$ for $|z| < 1$. This is a vector-valued version of a result by D. Sarason and some applications to operator-valued functions are given. (Received January 26, 2008)