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**Laura De Carli\*** (decarli1@fiu.edu), Department of Mathematics, Univ. Park, FL 33199, and **Julian Edward**, Florida International University, Miami, FL 33199. *Remarks on Riesz bases on Hilbert spaces and exponential bases on domains of  $R^d$* . Preliminary report.

Given a Riesz basis  $\mathcal{V} = \{\xi_j\}_{j \in N}$  in a separable Hilbert space  $H$  and a set of unit vectors  $B = \{w_j\}_{j \in N}$ , we consider the sets  $B_N$  obtained by replacing the vectors  $\xi_1, \dots, \xi_N$  with vectors  $w_1, \dots, w_N$ . We show necessary and sufficient conditions that ensure that the sets  $B_N$  are Riesz bases of  $H$  and we evaluate the frame constants of the  $B_N$  when  $\mathcal{V}$  is an orthonormal set. Then, we obtain sufficient conditions for the existence of exponential Riesz bases on domains of  $R^d$  (Received August 27, 2021)