We consider the problem of interpolating functions from shift-invariant spaces and more general function spaces of the form

\[ V(\psi, \mathcal{X}) := \left\{ \sum_{j \in \mathbb{Z}} c_j \psi(\cdot - x_j) : (c_j) \in \ell_2(\mathbb{Z}) \right\} \]

where the interpolants themselves lie in a similar space of translates of a given kernel. We discuss conditions on the shift kernel \( \psi \) such that the sampling problem at certain nonuniform point-sets \( \mathcal{X} \subset \mathbb{R} \) is well-defined, and additionally give sufficient conditions on a family of kernels \( (\phi_\alpha)_{\alpha \in A} \) such that one can recover \( f \in V(\psi, \mathcal{X}) \) from interpolants \( I_\alpha f \in V(\phi_\alpha, \mathcal{Y}) \) without necessarily requiring that \( \mathcal{X} = \mathcal{Y} \). (Received September 14, 2016)