1172-46-242 **Isaac Z Pesenson***, 182 Stephenson way, Huntingdon valley, PA 19006. *Sampling by averages on metric measure spaces.*

In the framework of a strictly local regular metric measure space $\mathbf{X}$ which is equipped with an essentially self-adjoint operator $\mathcal{L}$ in the corresponding $L_2(\mathbf{X})$ we introduce a subspaces $PW_\omega(\mathcal{L})$, $\omega > 0$, of Paley-Wiener functions of bandwidth ω. It is shown that every function in $PW_\omega(\mathcal{L}),\ \omega > 0$, is uniquely determined by its average values over a family of balls $B(x_j, \rho)$, $x_j \in \mathbf{X}$, which form an admissible cover of $\mathbf{X}$ and whose radii are comparable to $\omega^{-1/2}$. The entire development heavily depends on some Poincaré-type inequalities. (Received August 30, 2021)