

Strict density inequalities for interpolation in weighted spaces of holomorphic functions in several complex variables.

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I will present a joint work with Karlheinz Gröchenig, Antti Haimi and José Luis Romero where we solve a problem posed by Lindholm and prove strict density inequalities for sampling and interpolation in Fock spaces of entire functions in several complex variables defined by a plurisubharmonic weight.

In particular, these spaces do not admit a set that is simultaneously sampling and interpolating. To prove optimality of the density conditions, we construct sampling sets with a density arbitrarily close to the critical density.