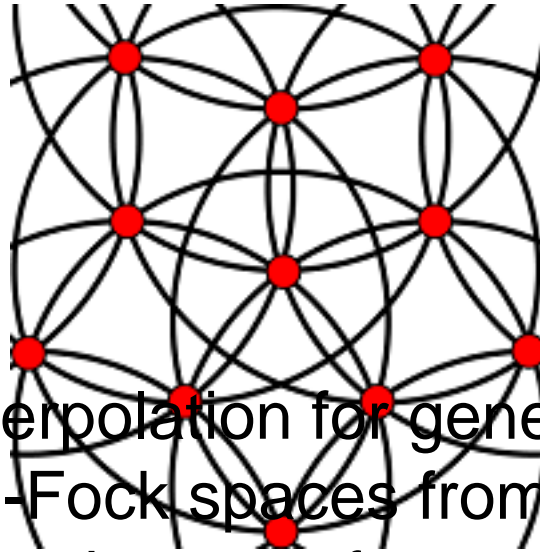


# CSASC 2013



Contribution ID : 18

## $L^2$ Interpolation for generalized Bargmann-Fock spaces from a singular hypersurface

### Content :

We will discuss a result on  $L^2$  interpolation to the ambient space, of data given on a singular hypersurface in  $\mathbb{C}^n$ , with respect to so-called generalized Bargmann-Fock  $L^2$  norms. It is known that the ability to interpolate all data places restrictions on the singularities, but the precise restrictions are not yet known. We will consider so-called transversal singularities, which include for example simple normal crossing singularities (but with additional uniformity conditions on the angles between the transverse planes). The actual constraint on the hypersurface, which is global, is known as uniform flatness. It was introduced by Ortega Cerda, Schuster and the speaker in the context of smooth hypersurfaces, and it is here generalized to the singular case. We will recall the notion of density of the hypersurface, and show that if the density is less than 1 (according to our normalization) then interpolation is possible. We will also show that uniform flatness is not necessary, either in the smooth or singular case, thus answering in the negative a question posed in the aforementioned work of Ortega Cerda, Schuster and the speaker. This is joint work with Vamsi Pingali.

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