

**AN APPROXIMATION FORMULA FOR  
HOLOMORPHIC FUNCTIONS BY  
INTERPOLATION ON THE BALL**

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We deal with a problem of the reconstruction of any holomorphic function  $f$  on the unit ball of  $\mathbb{C}^2$  from its restrictions on a union of complex lines. We give an explicit formula of Lagrange interpolation's type that is constructed from the knowledge of  $f$  and its derivatives on these lines. We prove that this formula approximates any function when the number of lines increases. The motivation of this problem comes also from possible applications in mathematical economics and medical imaging.