# İSTANBUL ANALYSIS SEMINARS

## $L^p$-REGULARITY OF THE BERGMAN PROJECTION

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**Abstract:** Let $\Omega$ be a bounded domain in $\mathbb{C}^n$. We denote the space of square integrable functions on $\Omega$ by $L^2(\Omega)$ and the space of square integrable holomorphic functions on $\Omega$ by $A^2(\Omega)$. The Bergman projection $\mathbf{B}_\Omega$ is the orthogonal projection operator from $L^2(\Omega)$ onto $A^2(\Omega)$. In this talk, we investigate the regularity of $\mathbf{B}_\Omega$ on $L^p$-spaces. We present results that relate the regularity of $\mathbf{B}_\Omega$ to some geometric properties of $\Omega$.

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    Bankalar Caddesi 2, Karaköy 34420, İstanbul