

Sophia University

Mathematics Colloquium

When: Friday, December 15, 2017, 17:30-18:30

Where: Room No. 201, Main Bldg., Ichigaya-Campus

Speaker: Dennis Bacani (Sophia University)

Title: Unique Solvability of Some Higher-order Singular Nonlinear Partial Differential Equations

Abstract: We consider singular nonlinear partial differential equations of the form $\Delta u = f(x, y, u)$ which is a function continuous in \bar{D} and holomorphic in D . We present a unique solvability result for this class of equations under the assumption that $f(x, y, u) = 0$ and for all $(x, y) \in D$. We then extend the unique solvability result to a wider class of equations.