# Analysis Seminar

## "Holomorphic Extension of Mappings between Hypersurfaces"

### By

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**Abstract:**

Let $M \subset \mathbb{C}^N, M' \subset \mathbb{C}^{N'}$ be real analytic hypersurfaces and $F$ be a holomorphic mapping on one side of $M$, continuous $M$ and $F(M) \subset M'$. When $N = N'$, assuming that $M$ and $M'$ have some non-degeneracy properties, it is well known that any such mapping $F$ extends holomorphically to the other side of the hyperplane $M$. When $N = N' = 1$, this result is known as Schwarz Reflection Principle. In the case of $N' > N$, a very little is known about the holomorphic extension of such mappings. This extension problem is also related to holomorphic extension of meromorphic mappings of hypersurfaces. In this talk, we will review some well known results and mention some recent results about these problems.

**Date:** Tuesday, February 26, 2019
**Time:** 16:00-17:00
**Place:** Mathematics Seminar Room, SA – 141
Tea and cookies will be served before the seminar.