

## AVVISO DI SEMINARIO

Martedì 25 luglio, alle ore 15:00, nell'aula G del Dipartimento di Matematica e Fisica, la Professoressa **Eleonora Messina**, *Dipartimento di Matematica e Applicazioni "Renato Caccioppoli" - Università degli Studi di Napoli Federico II*, terrà un seminario dal titolo

### **The discrete Paley-Wiener theorem with application to stability of numerical methods for renewal equations**

**Abstract:** The asymptotic analysis of renewal equations has been a very active field over the past several decades. The Paley-Wiener Theorem provides a powerful tool for analysing the asymptotic behaviour of solutions. The discrete analogue has been widely adopted to study stability of numerical solutions to these problems. Here we show how some extended results related to the discrete Paley Wiener Theorem can be applied to investigate the asymptotic behaviour of the numerical solutions to certain integral and integro-differential equations, mathematical models in life science. The results are generalized to wider classes of problems.

This is joint work with Antonia Vecchio (IACCNr).

I Proponenti

Rosanna Campagna, Serena Crisci, Valentina De Simone e Gerardo Toraldo