
SEMINARIO DE ANÁLISIS NUMÉRICO Y MODELACIÓN MATEMÁTICA

GIMNAP-Departamento de Matemática, UBB
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Expositor:

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Título de la Charla:

***The Bidomain Equations
with FitzHugh-Nagumo Nonlinearities***

Fecha y Hora:

Martes 3 de Septiembre de 2019, 16:00 Horas.

Lugar:

Sala Seminario, Facultad de Ciencias
Universidad del Bío-Bío.

Resumen

In this talk we consider the bidomain equations with FitzHugh-Nagumo nonlinearities arising in the study of electrophysiology. We show that the associated bidomain operator admits maximal L^p -regularity. This allows us to prove local as well as global well-posedness results in the weak and strong setting for initial data in critical spaces. Moreover, we give stability results for spatially constant equilibria. This is joint work with Jan Prüss.