

DEPARTAMENTO DE MATEMÁTICA APLICADA



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## High order Whitney forms and discrete potentials

When using the lower order Whitney elements on a simplicial complex, the matrices describing the external derivative, namely, the differential operators gradient, curl and divergence, are the incidence matrices between edges and vertices, faces and edges, and tetrahedra and faces. This is very useful in deriving efficient methods for the construction of discrete vector potentials. We will see to which extent this property holds true for high order Whitney forms and how it can be used for the construction of discrete forms with assigned external derivative.

Fecha	Miércoles, 30 de mayo de 2018
Lugar	Salón de Grados - Facultad de Matemáticas
Hora	12:00
Idioma	Castellano

XUNTA

**DE GALICIA** 

