

**Gorenstein liaison of divisors on standard determinantal schemes**

Marta Casanellas Rius, Universitat de Barcelona.

**ABSTRACT**

---

The goal of this poster is to use the main tools of Gorenstein liaison theory in order to prove, among other things, that every arithmetically Cohen-Macaulay (briefly ACM) effective divisor  $C$  on a general smooth standard determinantal surface  $S \subset \mathbb{P}^4$  is Gorenstein linked to a complete intersection (briefly glicci). Analogously, we prove that every ACM reduced subscheme  $C \subset \mathbb{P}^n$  of codimension 2,3,4 or 5, which is a divisor on a smooth rational normal scroll, is glicci. As a byproduct, we obtain that if  $C \subset \mathbb{P}^n$  is a rational curve or  $C \subset \mathbb{P}^n$  is a generic Castelnuovo curve of codimension 2,3,4 or 5, then  $C$  is glicci.

---

**Keywords:** *liaison, Cohen-Macaulay, determinantal scheme, rational normal scroll*

**Mathematics Subject Classification:** *14H45, 14C10, 14C20*

**Contact Address:** `casanell@mat.ub.es`