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A consequence of the Segre-Manin theorem is that a del Pezzo surface of degree two is unirational over its base field as long as it possesses a general rational point defined over the field in question. In this work, joint with D. Testa and A. Várilly-Alvarado, we show that all del Pezzo surfaces of degree two over a finite fields are unirational with at most three possible exceptions. Recently, Festi and van Luijk showed that these three last surfaces are also unirational. I will discuss the arguments involved in our proof.

Joint work with Damiano Testa (Warwick, UK) and Anthony Várilly-Alvarado (Rice, USA).