1011-94-76   **Roxana Smarandache*** (`rsmarand@sciences.sdsu.edu`), Univ. of Notre Dame, Dept. of Mathematics, 275 Hurley Hall, Notre Dame, IN 46556, and **Pascal O. Vontobel**. *Minimal Pseudo-codewords of Codes from Finite Geometries.*

For assessing the performance of linear programming decoding it is necessary to know the minimal pseudo-codewords. In this talk we study the minimal pseudo-codewords of some Tanner graphs derived from projective planes and give estimates on their pseudo-weight. Because of the close relationship between linear programming decoding and iterative decoding algorithms (like the sum-product and min-sum decoding algorithms), minimal pseudo-codewords are also relevant for the latter type of decoding algorithms. (Received August 18, 2005)