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Where Karen Meagher first encountered the Erdos-Ko-Rado Theorem

Karen Meagher first encountered the Erdos-Ko-Rado theorem when studying covering arrays. The Erdos-Ko-Rado theorem and Sperner's Lemma form the basis for the only known construction of an infinite family of optimal non-orthogonal covering arrays. I will define covering arrays, talk about their applications but concentrate the talk on the beautiful theorem of Renyi and Katona that determines the optimal size of binary covering arrays of strength 2. This encounter was the beginning of Karen's productive relationship with Erdos-Ko-Rado type problems.