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*Non-cyclic branched covers of the complex projective plane*

We will discuss the construction of 4-manifolds by means of non-cyclic abelian branched covers. In particular, if we choose our branch locus to be a line arrangement in  $\mathbb{C}P^2$  then we will see conditions under which the branch cover is a surface of general type. We also look at when these surfaces can have non-negative signature. Furthermore, we see how this relates to the *geography* problem for simply connected nonspin symplectic 4-manifolds and mention the speaker's recent joint work with his collaborators.