Blocking sets in paths and cycles designs

Paola Bonacini
Catania University
bonacini@dmi.unict.it

Let $\Sigma = (X, B)$ be a G-design of order v. A transversal T of Σ is a subset of X intersecting every block of B. A blocking set T of Σ is a transversal such that also its complementary $C_X T$ is a transversal of Σ. We say that a blocking set T is perfect if there exists a constant $C \in \mathbb{N}$ such that in every block of B there are exactly C edges having an extreme in T and the other extreme in $C_X T$. We study blocking sets on path and cycle designs.

.