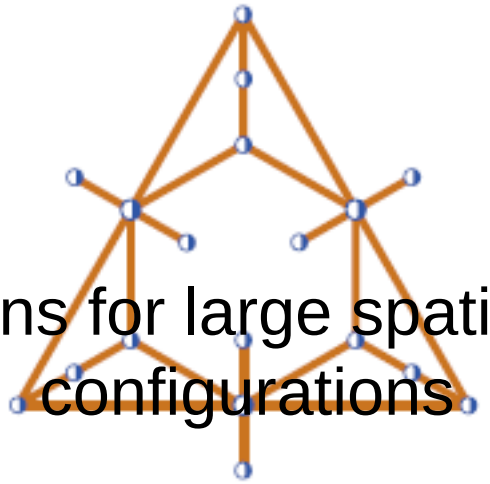
# Bled'11 - 7th Slovenian International Conference on Graph Theory



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## Constructions for large spatial point-line configurations

**Content** :

Regular and other highly symmetric polytopes may serve as a scaffolding on which spatial (n_k) point-line configurations can be built. We present some classes of configurations obtained by this method. We introduce the notion of a product of point-line configurations. Using this notion, we show that powers of complete multilaterals provide an infinite series of (n_k) configurations for which both n and k can be larger than any given number. The method of "polytopal scaffolding" and the method of powers can also be combined; a class of examples obtained in this way is presented as well. Finally, we formulate an incidence statement concerning a (100_4) configuration in 3-space derived from the product of two complete pentalaterals; it is posed as a problem.

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