Seminar on Geometric Function Theory Meeting 104, 105 (8th, 15th October 2012)

lecture: Geometric properties of the tetrablock

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In the lecture the \mathbb{C} -convexity of the tetrablock was proven. The proof relies on the description of the set of supporting hyperplanes of the tetrablock. This description is based on a close relation between the tetrablock and the symmetrized bidisc, another domain appearing, similarly as the tetrablock, in the theory of μ -synthesis. As a byproduct of the proof a class of domains, being the proper images of the symmetrization mapping, is studied and some of their properties are obtained.