

New criteria and constructions of Brunnian links

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Abstract

We present two practical and widely applicable methods, including some criteria and a general procedure, for detecting Brunnian property of a link, if each component is known to be unknot. The methods are based on observation and handwork. They are used successfully for all Brunnian links known so far. Typical examples and extensive experiments illustrate their efficiency. As an application, infinite families of Brunnian links are created and we establish a general way to construct new ones in bulk. This is a joint work with Weibiao Wang.