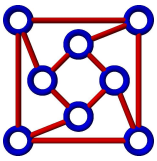

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ON ŠOLTÉS GRAPHS

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Let G be a graph. Its Wiener index, $W(G)$, is the sum of all distances in G. In 1991 Šoltés observed that $W(C_{11}) = W(P_{10})$. That means that if you delete any vertex from the cycle C_{11}, the Wiener index remains the same. Currently, graphs with this property are called Šoltés graphs, and the only Šoltés graph known to this day is C_{11}. In the talk we summarize some recent results on this topic.

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