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Splicing and zeta functions

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Many properties of plane curve singularities are contained in the so-called splice diagram. By incorporating a differential form into the splice diagram, Nmethi and Veys proved a splicing formula. This splice diagram is essentially a decorated dual graph of an embedded resolution and splicing is operation on these splice diagrams. It splits such a graph into two parts and the involved topological zeta functions are related by this splicing formula. An interesting question is then what happens if we look at more general zeta functions such as the motivic zeta function and the monodromic motivic zeta functions. I discuss these (splice) diagrams and give another proof of the splicing formula. The advantage of this proof is that it also is valid for these other zeta functions. However I will also discuss some problems arising from considering these other zeta functions.

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