

List of tree diagrams implementing the $d = 9$ neutrino mass operator $LLHH(HH^*)^2$

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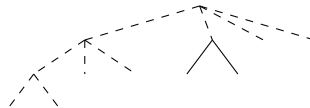
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In the paper “*High-dimensional neutrino masses*” (arXiv:180A.AAAAA [hep-ph]) we considered all possible tree-level realizations of the neutrino mass operators $LLHH(HH^*)^{(d-5)/2}$ with $d = 9, 11, 13$. For $d = 9$, there are 66 diagrams organized in 18 different topologies, which are listed here.

Topology 1



Topology 2



Topology 3



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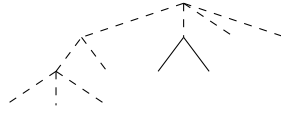
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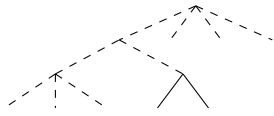
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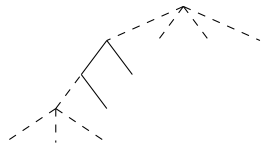
Topology 4



Topology 5



Topology 6



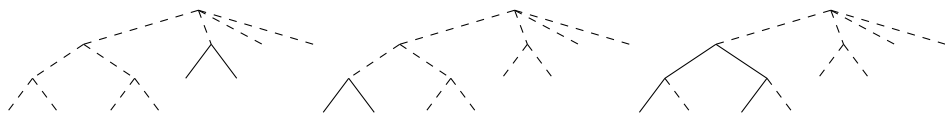
Topology 7



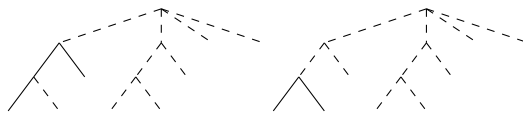
Topology 8



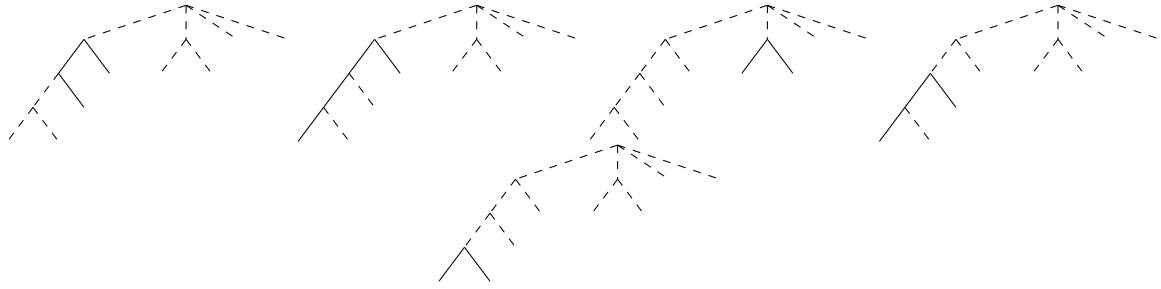
Topology 9



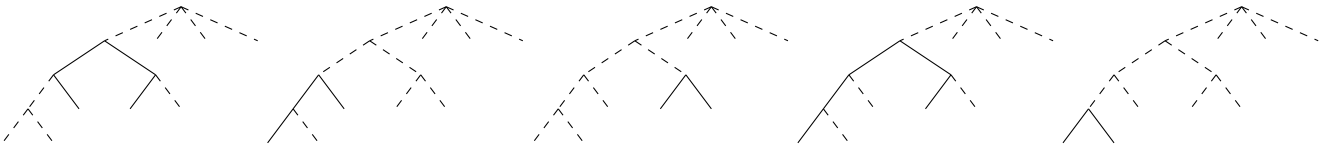
Topology 10



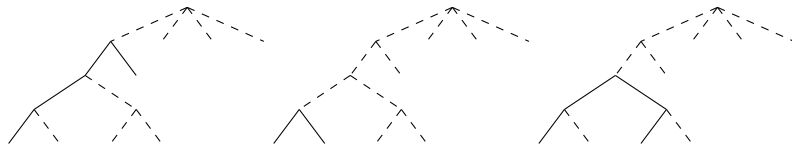
Topology 11



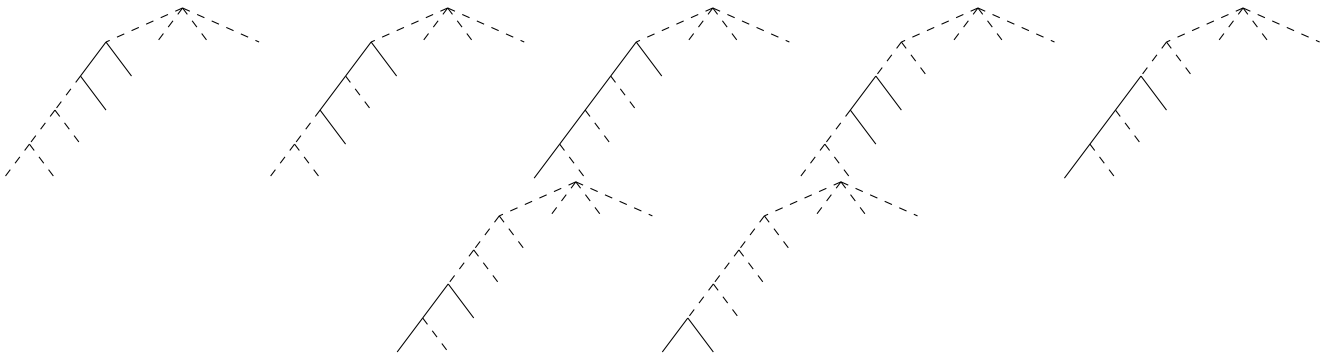
Topology 12



Topology 13

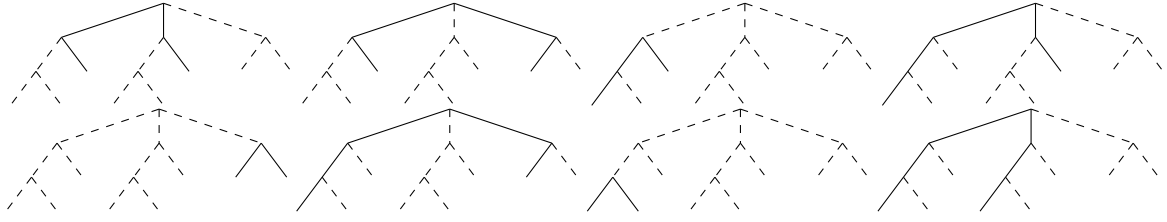
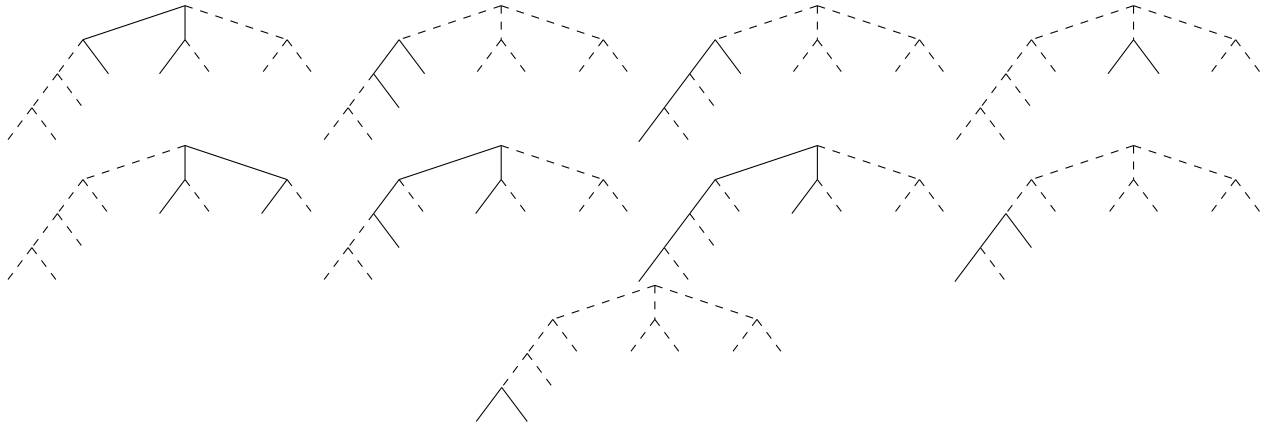


Topology 14



Topology 15



Topology 16**Topology 17****Topology 18**