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BSM contributions to the Z gamma gamma and ZZ gamma self couplings at hight energies

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The Z \gamma \gamma and ZZ \gamma couplings in the SM and MSSM models were investigated. For the both models the form factors h3z, h3g, f5g were estimated, the values of which for the low-energy region were given earlier in the work "New and standard physics contributions to anomalous Z and gamma selfcouplings". We have extended the considering energy range up to 14 TeV and investigated the possibility to exclude the forbidden energies (and model parameters) from the last restrictions obtained at LHC. It was found that in order to constrain the MSSM model parameters, a measurement accuracy of the order 10^-7 is required. We also propose a method for constraining the parameters of other models and investigate the 2HDM model for this purpose.

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