

## Higgs boson searches in CP-conserving and CP-violating MSSM scenarios with the DELPHI detector

The DELPHI Collaboration

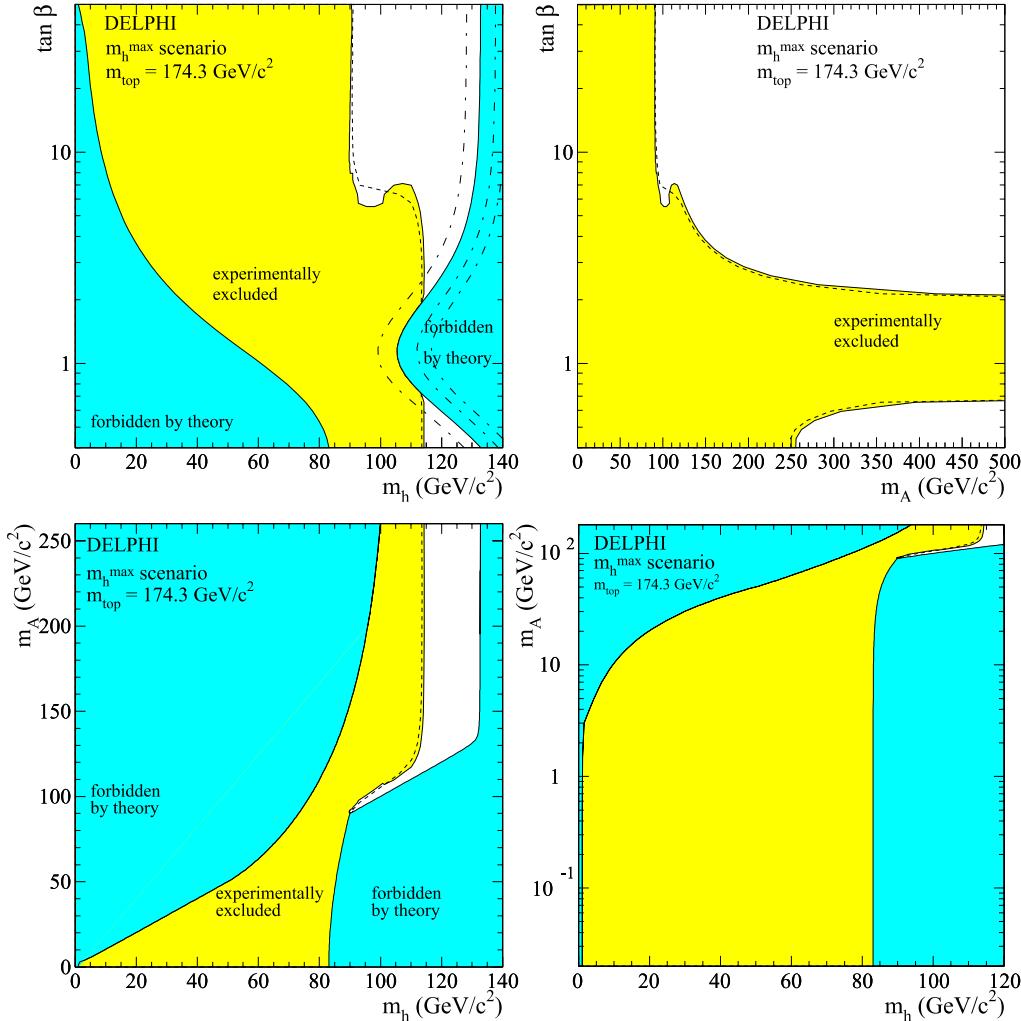
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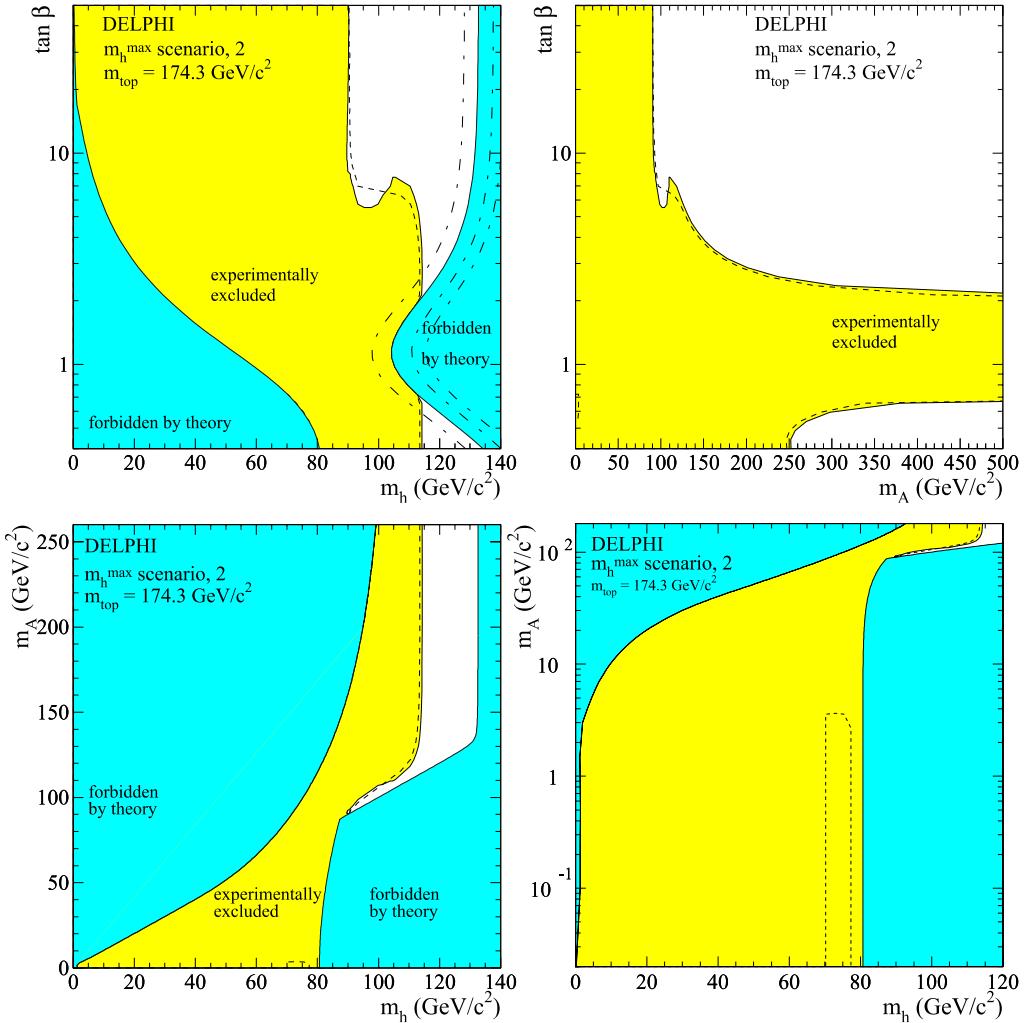
In the original version of this article unfortunately the bottom-right plots in Figs. 6–8 and 10 were reproduced wrongly (on pages 14, 15, 16 and 18). The corrected figures are given below.



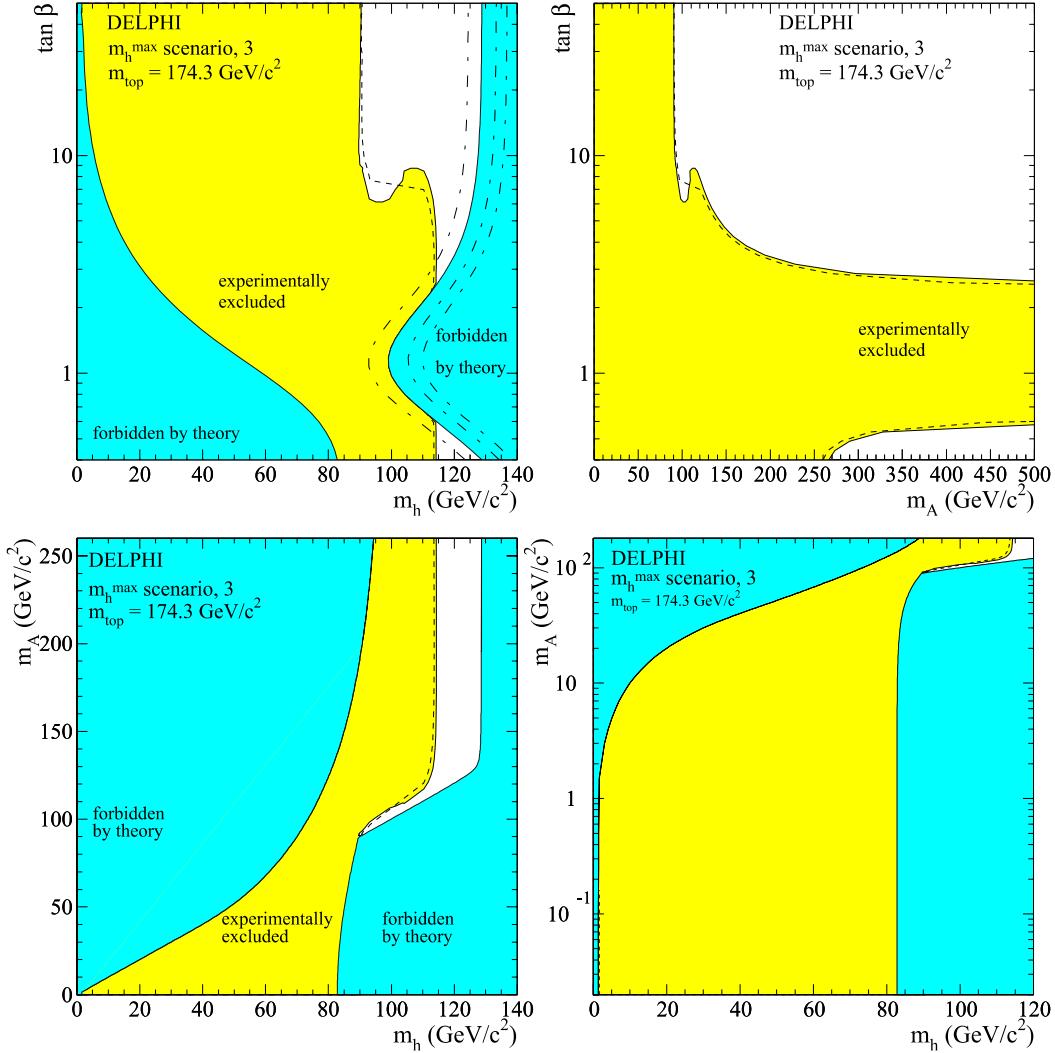
**Fig. 6.** MSSM  $m_h^{\max}$  scenario for a top mass of  $174.3 \text{ GeV}/c^2$ : regions excluded at 95% CL by combining the results of the Higgs boson searches in the whole DELPHI data sample (*light-grey*). The *dashed curves* show the median expected limits. The *medium-grey* areas are the regions not allowed by theory. The *dash-dotted lines* in the *top left-hand plot* are the theoretical upper bounds for a top mass of 169.2, 179.4 and 183.0  $\text{GeV}/c^2$  (from *left to right*)

The online version of the original article can be found at  
<http://dx.doi.org/10.1140/epjc/s10052-007-0506-1>.

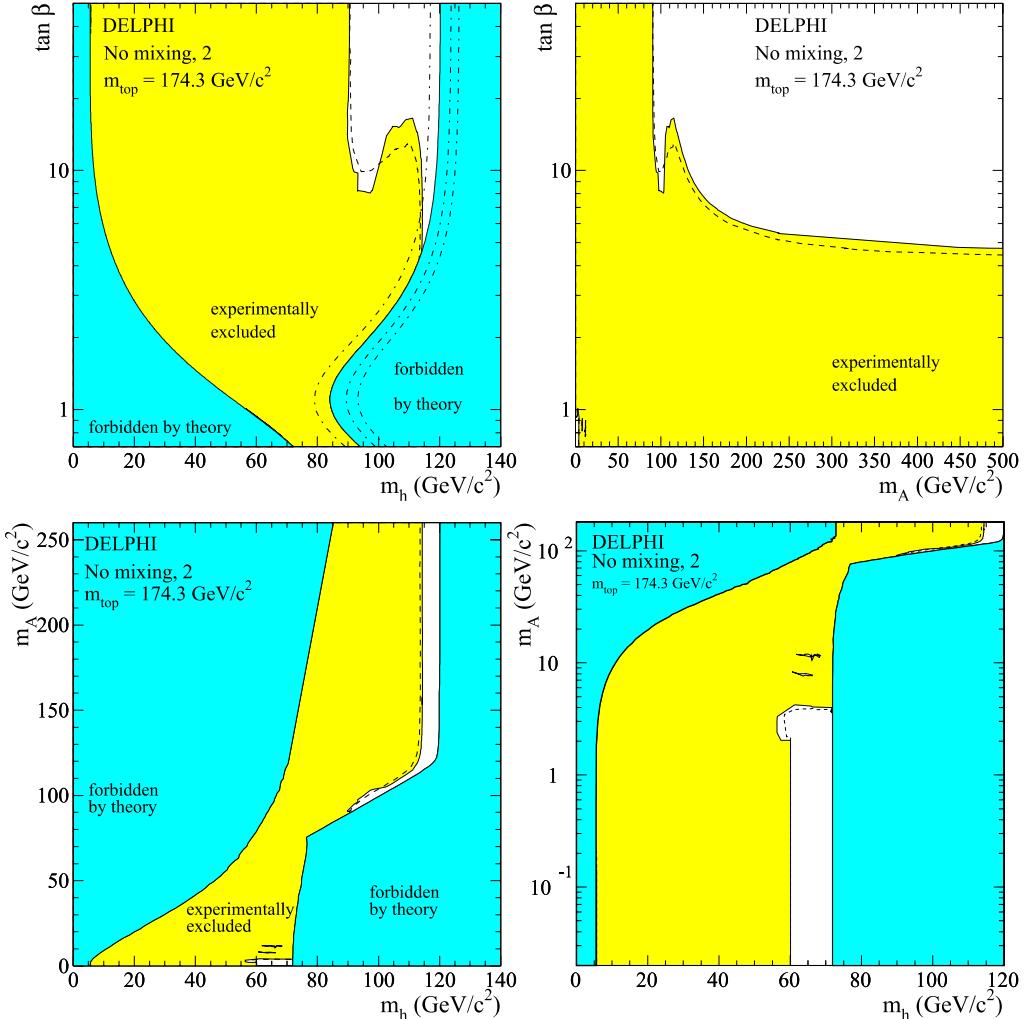
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**Fig. 7.** MSSM  $m_h^{\text{max}}$  scenario with positive  $\mu$  for a top mass of  $174.3 \text{ GeV}/c^2$ : regions excluded at 95% CL by combining the results of the Higgs boson searches in the whole DELPHI data sample (*light-grey*). The *dashed curves* show the median expected limits. The *medium-grey areas* are the regions not allowed by theory. The *dash-dotted lines* in the *top left-hand plot* are the theoretical upper bounds for a top mass of 169.2, 179.4 and 183.0  $\text{GeV}/c^2$  (from *left to right*)



**Fig. 8.** MSSM  $m_h^{\max}$  scenario with positive  $\mu$  and negative  $X_t$  for a top mass of  $174.3 \text{ GeV}/c^2$ : regions excluded at 95% CL by combining the results of the Higgs boson searches in the whole DELPHI data sample (light-grey). The dashed curves show the median expected limits. The medium-grey areas are the regions not allowed by theory. The dash-dotted lines in the top left-hand plot are the theoretical upper bounds for a top mass of 169.2, 179.4 and  $183.0 \text{ GeV}/c^2$  (from left to right)



**Fig. 10.** MSSM no mixing scenario with positive  $\mu$  and large  $M_{\text{susy}}$  for a top mass of  $174.3 \text{ GeV}/c^2$ : regions excluded at 95% CL by combining the results of the Higgs boson searches in the whole DELPHI data sample (*light-grey*). Among the four unexcluded regions at low  $m_A$ , the strip at low  $m_H$  is fully excluded by the limit on the  $Z$  partial width that would be due to new physics [40]. The *dashed curves* show the median expected limits. The *medium-grey areas* are the regions not allowed by theory. The *dash-dotted lines* in the *top left-hand plot* are the theoretical upper bounds for a top mass of 169.2, 179.4 and 183.0  $\text{GeV}/c^2$  (from *left to right*)