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## 6dB of squeezing level at GEO 600

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Squeezed light has been employed at GEO 600 for almost 10 years, recently reaching the highest level ever measured on a large scale interferometer. This improvement was achieved after work towards the reduction of optical losses in the squeezed light injection path.

The in-air injection path was rebuilt by cleaning and substituting some optics. Faraday isolators were carefully tuned in order to achieve optimal isolation; the PBS mounts of the in-vacuum Faraday isolator are equipped with quadrant photodiodes for the monitoring of rejected light during the tuning operation.

Finally, while investigating second-order mode-mismatch, a way to correct for astigmatism was found.

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