

# Topology of the Gromov boundary of free product of hyperbolic groups

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Abstract: It is clear that Gromov boundary  $\partial(G * H)$  of the free product of hyperbolic groups  $G$  and  $H$  is, up to homeomorphism, some combination of the topological spaces  $\partial G$  and  $\partial H$ . However, it is much less clear if this combination depends uniquely on the spaces  $\partial G$  and  $\partial H$ , and not on groups  $G$  and  $H$ . We will show that the latter is true, and describe an explicit functorial construction which yields  $\partial(G * H)$  out of  $\partial G$  and  $\partial H$  (and does not refer to  $G$  and  $H$ ). Joint work with Alexandre Martin.