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## **Interaction Region Magnets for VLHC\***

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The interaction region (IR) magnets for the proposed very large hadron collider (vlhc) requires high gradient quadrupoles and high field dipoles for high luminosity performance. Moreover, in case of a doublet IR optics with flat beams, the design of the first 2-in-1 quadrupole defines the geometry and pole tip field in this and other IR magnets. This paper will present a novel design of this magnet that allows a very small separation between the two apertures. A brief description and preliminary design of other magnets will also be presented.

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