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Autore	Schneider Andre
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Sommario/riassunto	Quantum sensing is a vast and emerging field enabling in-situ studies of quantum systems and hence the development of quantum hybrid systems. This work creates the fundament of direct superconducting-magnetic hybrid systems by developing a local microwave sensing scheme and studying the influence of a static magnetic field on a superconducting qubit. Finally, a proof-of-principle hybrid system is demonstrated, which opens the path towards superconducting-magnetic quantum circuits.