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Sommario/riassunto	In this book, hybrid systems based on yttrium-iron-garnet (YIG), three dimensional microwave cavity resonators, and superconducting transmon qubits, are investigated by continuous wave and pulsed microwave spectroscopy. Limitations to the magnetic linewidth in the quantum regime are identified and coherent exchange between a magnon and a superconducting qubit are demonstrated. Finally, a first step towards a strongly coupled hybrid system containing all three components is demonstrated.