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Q-reducibility and Other Strong Reducibilities

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I will survey some of the reasons we care about strong reducibilities in computability theory. These include the fact that they arise naturally in the combinatorics of reductions in classical mathematics, and their utility in understanding, for example, Turing reducibility. I will finish with a brief report on some recent work on quasi-reducibility, jointly with Mariya Soskova and Sapir Ben-Sahar. This “reducibility” has relevance to, for example, existentially closed groups. I will try and spare you details of priority arguments. I will also give an account of the Merchenkov-et. al. solution to Post’s Problem, which is not as well-known as it ought to be.