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Title:	Quantum private comparison over noisy channels
Authors:	Siddhu, Vikesh (/jspui/browse?type=author&value=Siddhu%2C+Vikesh) Arvind (/jspui/browse?type=author&value=Arvind)
Keywords:	Quantum private comparison (QPC) EPR-based protocol noisy channels
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Publisher:	Springer New York LLC
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Abstract:	Quantum private comparison (QPC) allows us to protect private information during its comparison. In the past, various three-party quantum protocols have been proposed that claim to work well under noisy conditions. Here, we tackle the problem of QPC under noise. We analyze the EPR-based protocol under depolarizing noise, bit flip and phase flip noise. We show how noise affects the robustness of the EPR-based protocol. We then present a straightforward protocol based on CSS codes to perform QPC which is robust against noise and secure under general attacks
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