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## Bell nonlocality: a resource for device-independent quantum information protocols

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Bell nonlocality is not only one of the most fundamental properties of quantum physics, but has also recently acquired the status of an information resource for device-independent quantum information protocols. In the device-independent approach, protocols are designed so that their performance is independent of the internal working of the devices used in the implementation. We discuss all these ideas and argue that device-independent protocols are especially relevant or cryptographic applications, as they are insensitive to hacking attacks exploiting imperfections on the modelling of the devices.