Catastrophic Penetration of Magnetic Flux into Hard Superconductors

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Magnetothermal instabilities (flux jumps) will be discussed in type II superconductors (LTSC and HTSC). Although the flux jumps last only a fraction of a millisecond, they have catastrophic influence on the structure of the material. We have investigated the structure of flux jump as a result of the huge avalanche. New experimental results related to this phenomenon one consider.