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Simulations of Runaway Electron Generation including Hot-Tail Effect

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The suppression and mitigation of runaway electron (RE) is an urgent issue of large scale tokamak operation. The contribution of hot-tail effect, which arises from the fast thermal quench, is studied using Fokker-Planck simulation. It is found that if the thermal quench is fast enough to invoke the hot-tail effect, it may produce seed REs and enhance total RE current even in a high electron density plasma.

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