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Anti-reconnection in a large system as the accelerator of the most energetic electrons

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We show via two-dimensional full-particle simulations that an anti-X-line facilitating a merger of magnetic islands in a large system produces the most energetic electron component. The strong electron acceleration is because the anti-reconnection is in such a driven manner that the associated electric field is an order of magnitude larger than those available upon normal reconnection. A possible application of the results to the electron acceleration process in solar flares is discussed.