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**On weak uniqueness for some degenerate SDEs by global  $L^p$  estimates**

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We prove uniqueness in law for possibly degenerate SDEs having a linear part in the drift term. Diffusion coefficients corresponding to non-degenerate directions of the noise are assumed to be continuous. When the diffusion part is constant we recover the classical degenerate Ornstein-Uhlenbeck process which only has to satisfy the Hörmander hypoellipticity condition. In the proof we also use global  $L^p$ -estimates for hypoelliptic Ornstein-Uhlenbeck operators recently proved in Bramanti-Cupini-Lanconelli-Priola (Math. Z. 266 (2010)) and adapt the localization procedure introduced by Stroock and Varadhan. As an appendix we present a quite general localization principle for martingale problems.