



Local Hölder continuity property of the Densities of Solutions of SDEs with Singular Coefficients

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We prove that the weak solution of a uniformly elliptic stochastic differential equation with locally smooth diffusion coefficient and Hölder continuous drift has a Hölder continuous density function. This result complements recent results of Fournier-Printems [\[F1\]](#), where the density is shown to exist if both coefficients are Hölder continuous and exemplifies the role of the drift coefficient in the regularity of the density of a diffusion.

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