Abstract: We consider Gaussian bridges; in particular their dynamic representations. We prove a Girsanov theorem between the law of Gaussian bridge and the original Gaussian process, which holds with natural assumptions. With some additional conditions we obtain dynamical representation for a Gaussian bridge. We discuss briefly the initial enlargement of filtrations in this context.

AMS subject classifications: 60G15; 60G18; 60G25; 60G44

Keywords: Gaussian processes; Brownian bridge; pinned Gaussian processes; tied down Gaussian processes; enlargement of filtration; fractional Brownian motion; fractional Brownian bridge

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