1035-60-497 **Kay Giesecke*** (giesecke@stanford.edu), Management Science & Engineering, 414 Terman Center, 380 Panama Way, Stanford, CA 94305-4026. *The correlation-neutral measure for counting processes.*

We show that the characteristic function of a counting process with totally inaccessible events is given by the Laplace transform of the counting process compensator evaluated at the characteristic exponent of the Poisson process, where the Laplace transform is taken under the complex measure defined by the characteristic martingale that we associate with the counting process. Calculating the characteristic function of the counting process therefore reduces to calculating the Laplace transform of the compensator under the complex measure. The computation of the Laplace transform is analogous to the computation of the price of a zero coupon bond in the term structure literature. We illustrate the complex measure change for affine point processes and we discuss applications to portfolio credit risk. (Received September 09, 2007)