$$A(X|\Lambda) \Pi(X|x_0,\Lambda) P(\Lambda|x_0,\lambda_0) \pi(x_0,\lambda_0) = A(\tilde{X}|\tilde{\Lambda}) \Pi(\tilde{X}|\tilde{x}_T,\tilde{\Lambda}) P(\tilde{\Lambda}|\tilde{x}_T,\lambda_T) \pi(\tilde{x}_T,\lambda_T)$$