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**Nikolay Tzvetkov\*** ([nikolay.tzvetkov@u-cergy.fr](mailto:nikolay.tzvetkov@u-cergy.fr)), 95000 Cergy, France. *Transport of gaussian measures by the flow of Hamiltonian PDE.*

The study of the transport of gaussian measures on Wiener spaces by transformations is a classical topic in probability theory. The Cameron-Martin theorem (published in 1944) provides a necessary and sufficient condition concerning the absolute continuity of the transported measure in the case when the transformation is a translation. The Cameron-Martin results was later extended to more general translations and also to more general transformations.

Unfortunately, the above mentioned abstract stochastic analysis results do not apply in the context of the flows of many classical Hamiltonian PDE (even in 1d) if one wishes to study the absolute continuity of the transport by the flow of natural gaussian measures. We recently developed an approach to solve the problem of the absolute continuity of the transported measure in several significant situations. In this talk we plan to survey these results. We also plan to present several remaining issues in this set of problems. (Received September 04, 2020)