FINAL REPORT

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The theory of Frobenius manifolds is a subject which is at the crossroad of many disciplines, such as singularity theory, topological field theory, Riemann-Hilbert problems, quantum cohomology, hydrodynamic type PDEs and integrable systems.

Semi–simple Frobenius manifolds may be realized as the space of parameters $u_1, \dots, u_n$ together with a $n \times n$ skew-symmetric matrix function $V(u_1, \dots, u_n)$ such that the linear differential operator $\Lambda(z) := \frac{\mathrm{d}}{\mathrm{d}z} - U - \frac{V}{z}$, U being a diagonal matrix of entries $u_1, \dots, u_n$, has constant monodromy data. The most important information on the monodromy data of $\Lambda(z)$ is the so–called *Stokes matrix* S, an upper triangular matrix with 1 on the diagonal. Generically, the Stokes matrix determines all other monodromy data. The Poisson bracket on the space of Stokes matrices was found by Ugaglia. This Poisson bracket is degenerate, its Casimirs being the eigenvalues of the matrix V. Surprisingly, this Poisson bracket coincides the semi-classical limit of the Nelson–Regge algebra appearing in $2+1$-dimensional quantum gravity. During this short visit we explored the reason for such a coincidence.