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Jonathan Alexander Aidan* (aidan@math.jussieu.fr), 175, rue Chevaleret, Bureau 7C08, 75013 Paris, France. *Symplectic Properties of the Space of Differential Equations in the Space of Logarithmic Systems.*

Let $n \geq 1$, let S be a finite set of points of the Riemann sphere, and let \mathcal{M} be the moduli space of irreducible fuchsian systems of rank n with logarithmic singularities lying in S and given “generic” local monodromies. This space is naturally endowed with a symplectic structure ω . Let further \mathcal{E} be the space of irreducible fuchsian differential equations of order n , with singularities lying in S and same local monodromies. Following a construction of van der Put and Singer, we can locally embed \mathcal{E} as a subspace \mathcal{N} of \mathcal{M} . As remarked by N. Katz, the dimension of \mathcal{N} is half the dimension of \mathcal{M} . We elaborate on this remark by proving that \mathcal{N} is a lagrangian subspace of \mathcal{M} relatively to the symplectic structure ω . (Received February 26, 2007)