

On the rigid local systems

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We consider splitting type of holomorphic vector bundles induced from Fuchsian system of differential equations free from accessory parameters. It is known, that monodromy preserving deformation of such system is a problem of determining the coefficient matrix of system so that the monodromy does not change when the positions of the singular points are varied. The deformation equation becomes a system of differential equations for accessory parameters as functions in the positions of singular points. When the system is free of accessory parameters, the deformation equation becomes trivial and in this case we can know many global properties of system. Besides in this case there exists one-to-one correspondence between monodromy data and Fuchsian systems. We calculate splitting type of two and three dimensional holomorphic vector bundles induced from rigid local systems on Riemann sphere.