There are four types of 4-dimensional Painlevé type equations which are obtained from deformation of Fuchsian equations. Namely, these are the Garnier system with 2 variables, a Fuji-Suzuki system, a Sasano system, and a matrix sixth Painlevé system.

We obtained a degeneration scheme which appear from the confluent of these associated Fuchsian equations. We only consider unramified case. The number of 4-dimensional Painlevé type equations obtained from the degeneration scheme is 22, including 9 nonlinear partial differential equations.

Although isomonodromic deformation theory were fully developed after Jimbo-Miwa-Ueno’s result (1980), we used classification of linear equations with spectral types and it permitted us this detailed study. All of the systems are expressed in the form of Hamiltonian system, and especially it is simply written by using the Hamiltonians of the classical Painlevé systems. (Received September 19, 2011)