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Tomoyuki Takenawa* (takenawa@kaiyodai.ac.jp), 2-1-6 Etchu-jima, Koto-ku, Tokyo, Tokyo 135-8533. *The space of initial conditions for some 4D Painlevé systems*. Preliminary report.

In recent years, research on 4D Painlevé systems have progressed mainly from the viewpoint of isomonodromy deformation of linear equations. In this talk we study the geometric aspects of 4D Painlevé systems by investigating the space of initial conditions in Okamoto-Sakai's sense, which was a powerful tool in the original 2D case. Specifically, starting from known discrete symmetries, we construct the space of initial conditions for some 4D Painlevé systems, and using the Néron-Severi bilattice, clarify the whole group of their discrete symmetries. The examples include the directly coupled 2D Painlevé equations, Noumi-Yamada's $A_5^{(1)}$ system and the 4D Garnier system. (Received September 25, 2017)