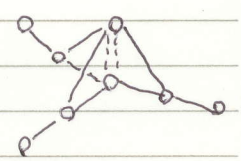
§4 Main result ($\widetilde{E}_6$ case)

compute $\pi_1(\mathbb{C}^8 \setminus D_{\widetilde{E}_6})$ using Zariski-van Kampen method.

Due to the Lefschetz hyperplane section theorem, we can take the section as

$$\begin{cases} t_5 = \cdots = t_7 = t_8 = 0 & \left(\text{due to the weighted homogeneity of } \Delta_{\widetilde{E}_6}(t)\right) \\ t_2 + t_3 + t_4 = 1 & \\ t_2 + \nu t_3 - \dfrac{\nu}{1+\nu} = 0 & \text{where } \nu^2 - \nu + 1 = 0. \end{cases}$$

In order to preserve $\mathbb{Z}/3\mathbb{Z}$ symmetry



we take the later two sections.