Maldacena

M2/5 brane decoupling

$$t^{u^2}_{v^5}\,s^3$$

N parallel M_6^- coincide

$${}^{us}H^{1/3}\,\bcancel{\mathrm{N}\!1} = \underline{v}^2 - \underline{t}^{\,2} + {}^{us}H\left(\underline{\ulcorner us\urcorner}^2 + \overset{2}{\ulcorner us\urcorner}\,\underbrace{us}{}^{2}_{4}\right)$$

$${}^{us}H = 1 + \frac{\pi\overset{3}{\ell}N}{\ulcorner us\urcorner^4}$$

$$\cancel{3} = \cdots \Longrightarrow N = \mathbb{S}^4_{\underbrace{us}}\,|\,\underline{\cancel{3}}\ \text{flux}$$

$$R^3 = \pi\overset{3}{\ell}N\begin{cases}\ell \rightsquigarrow 0\\ N \rightsquigarrow \infty\end{cases} \Longrightarrow \mathrm{AdS}^7_{2R}\times\mathbb{S}^4_R$$

N parallel M_3^- coincide

$${}^{vs}H^{2/3}\,\bcancel{\mathrm{N}\!1} = \underline{u}^2 - \underline{t}^{\,2} + {}^{vs}H\left(\underline{\ulcorner vs\urcorner}^2 + \overset{2}{\ulcorner vs\urcorner}\,\underbrace{vs}{}^{2}_{7}\right)$$

$${}^{vs}H = 1 + \frac{\pi^6 2^5 \pi^2 N}{\ulcorner vs\urcorner^6}$$

$$\overset{*}{\cancel{3}} = \cdots \Longrightarrow \text{flux } N = \mathbb{S}^7_{\underbrace{vs}}\,|\,\underline{\overset{*}{\cancel{3}}}$$

$$R^6 = \pi\overset{6}{\ell}N\,2^5\,\pi^2\begin{cases}\ell \rightsquigarrow 0\\ N \rightsquigarrow \infty\end{cases} \Longrightarrow \mathrm{AdS}^4_{R/2}\times\mathbb{S}^7_R$$