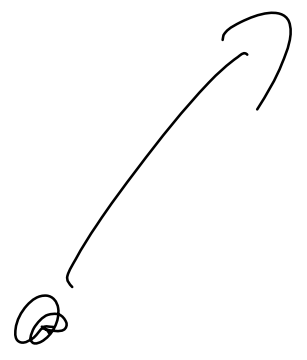
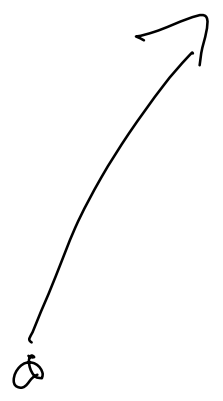


15/11/2019  
Wetterstellen  
11.00h  
11.15h

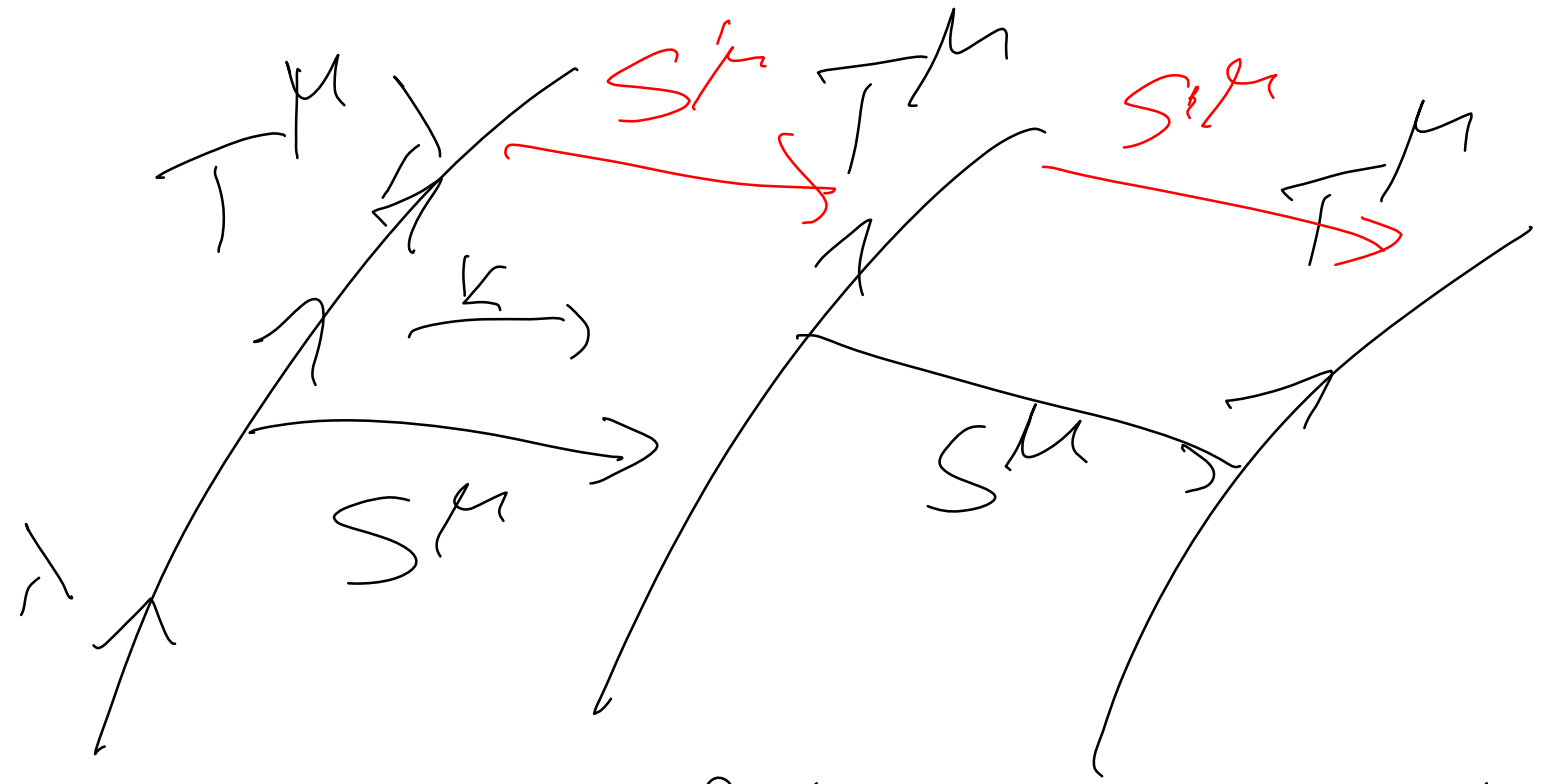


11.15h

11.00h



16/



$$S_{\mu}^{\nu} T^{\mu} = 0 \quad \text{if } \nu = \mu = 0, 1, 2, 3 \quad - \quad S^{\mu}, T^{\mu}$$



17/

Handwritten text in Arabic script, possibly a title or introduction, including the word "تم" (Tamm) and "التي" (al-ti).

$$\tau^\nu D_\nu T^\mu = 0$$

$$\tau^\nu D_\nu S^\mu = S^\nu D_\nu T^\mu \quad .2$$

$$18/ T^{\mu} = \frac{dx^{\mu}}{dt}$$

2 גורמים

with  $V(t)$   $f(t) \sim k$

הגורמים האלה

$$S^{\mu} = \frac{dx^{\mu}}{dk}$$

הגורמים

$$T^{\nu} D_{\nu} S^{\mu} = \frac{dx^{\nu}}{dt}$$

$$\left( \frac{\partial}{\partial x^{\nu}} \frac{dx^{\mu}}{dk} + \Gamma^{\mu}_{\nu\rho} \frac{dx^{\rho}}{dk} \right)$$

1g/

$$= \frac{d^2 x^\mu}{d\lambda dK} + \begin{matrix} \nearrow \mu \\ \searrow \nu \end{matrix} \frac{dx^\nu}{dK} \frac{dx^\mu}{d\lambda} =$$

$$= \frac{d^2 x^\mu}{d\lambda dK} + \begin{matrix} \nearrow \mu \\ \searrow \nu \end{matrix} \frac{dx^\nu}{dK} \frac{dx^\mu}{d\lambda}$$

$$= \frac{dx^\nu}{dK} \left( \frac{\partial}{\partial x^\nu} \frac{dx^\mu}{d\lambda} + \begin{matrix} \nearrow \mu \\ \searrow \nu \end{matrix} \frac{dx^\rho}{d\lambda} \right)$$

20f

$$\Rightarrow S^0 D_0 T^M$$

21/

$$a^M = (T^J D_J)^2 S^M =$$

$$= T^J D_J (T^\lambda D_\lambda S^M) = T^J D_J (S^\lambda D_\lambda T^M)$$

$$= (D_\lambda T^M) T^J D_J S^\lambda + S^\lambda T^J D_J (D_\lambda T^M)$$

$$= (D_\lambda T^M) T^J D_J S^\lambda + S^\lambda T^J D_\lambda (D_J T^M)$$

22/

$$\tau^{\mu} + \underline{S^{\lambda} \tau^{\nu} [D_{\nu}, D_{\lambda}] \tau^{\mu}} =$$



23/

$$D_{\lambda} T^M S^0 D_{\nu} T^{\lambda} + S^{\lambda} T^0 D_{\lambda} C$$

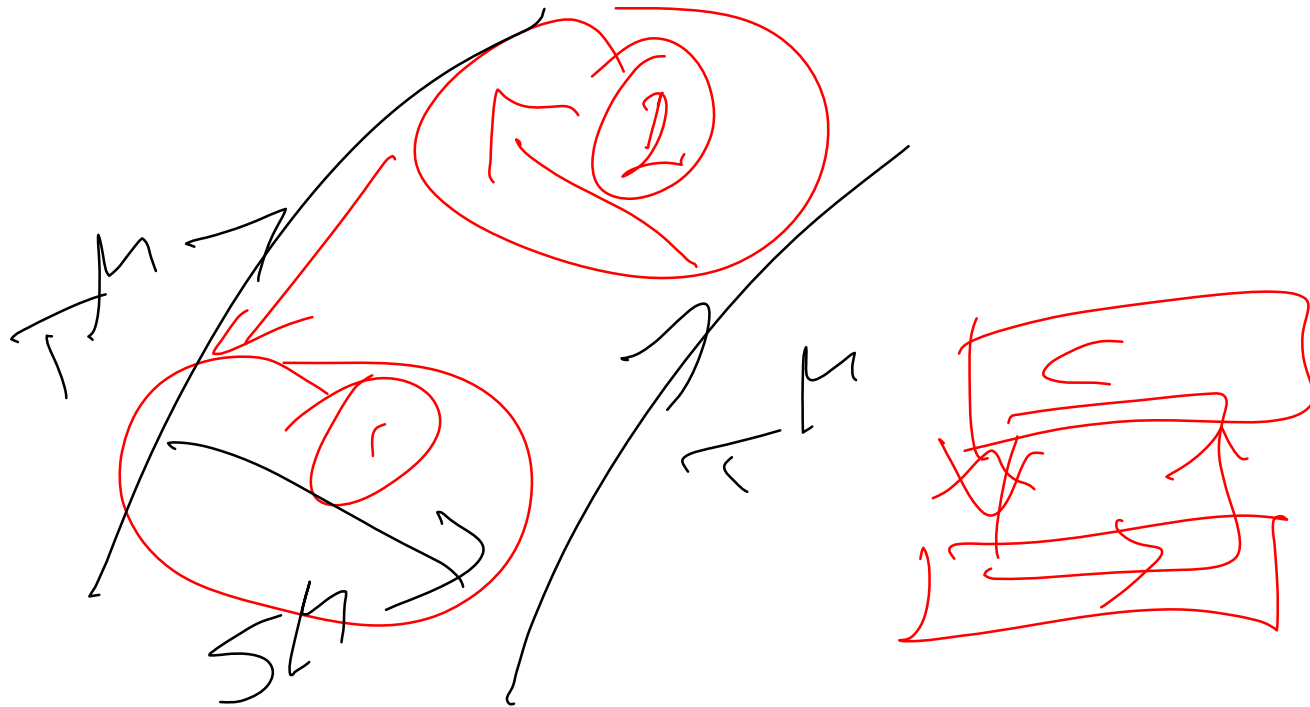
$$= \cancel{(S^0 D_{\nu} T^{\lambda})} (D_{\lambda} T^M) + S^{\lambda} D_{\lambda} C$$

$$S^{\lambda} T^0 R^M \sigma_{\nu \lambda} T^0$$

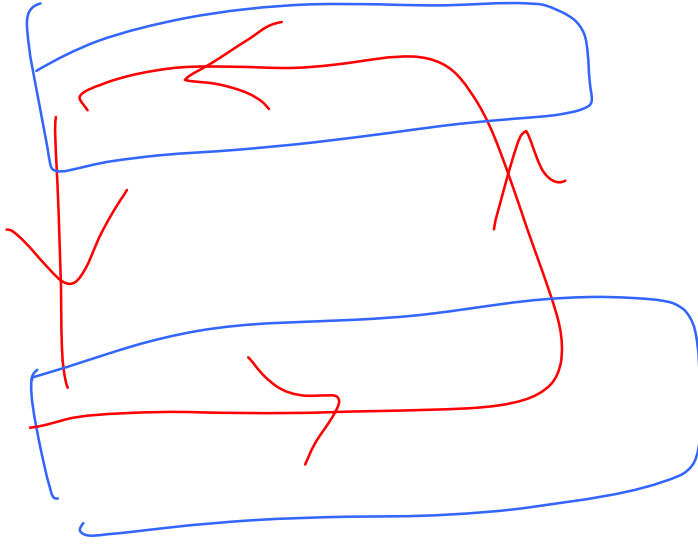
$$a^M = R^M \sigma_{\nu \lambda} T^0 T^0 S^{\lambda}$$

$$\begin{aligned}
 & 24 \\
 & D_{\nu} T^{\mu} + S^{\lambda} T^{\nu} R_{\sigma \nu \lambda} T^{\sigma} \\
 & \underbrace{T^{\sigma} D_{\nu} T^{\mu}} - (\cancel{S^{\lambda} D_{\lambda} T^{\sigma}}) (\cancel{D_{\nu} T^{\mu}}) +
 \end{aligned}$$

0



25/



$$\mathbb{R} \mu_0 = \mathbb{R} \mu_1 \mu_2 \mu_3$$

$$\mathbb{R} = \mathbb{R} \mu_1 \mu_2 \mu_3$$

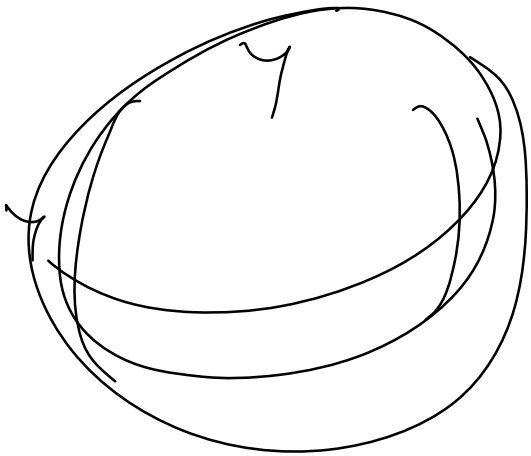
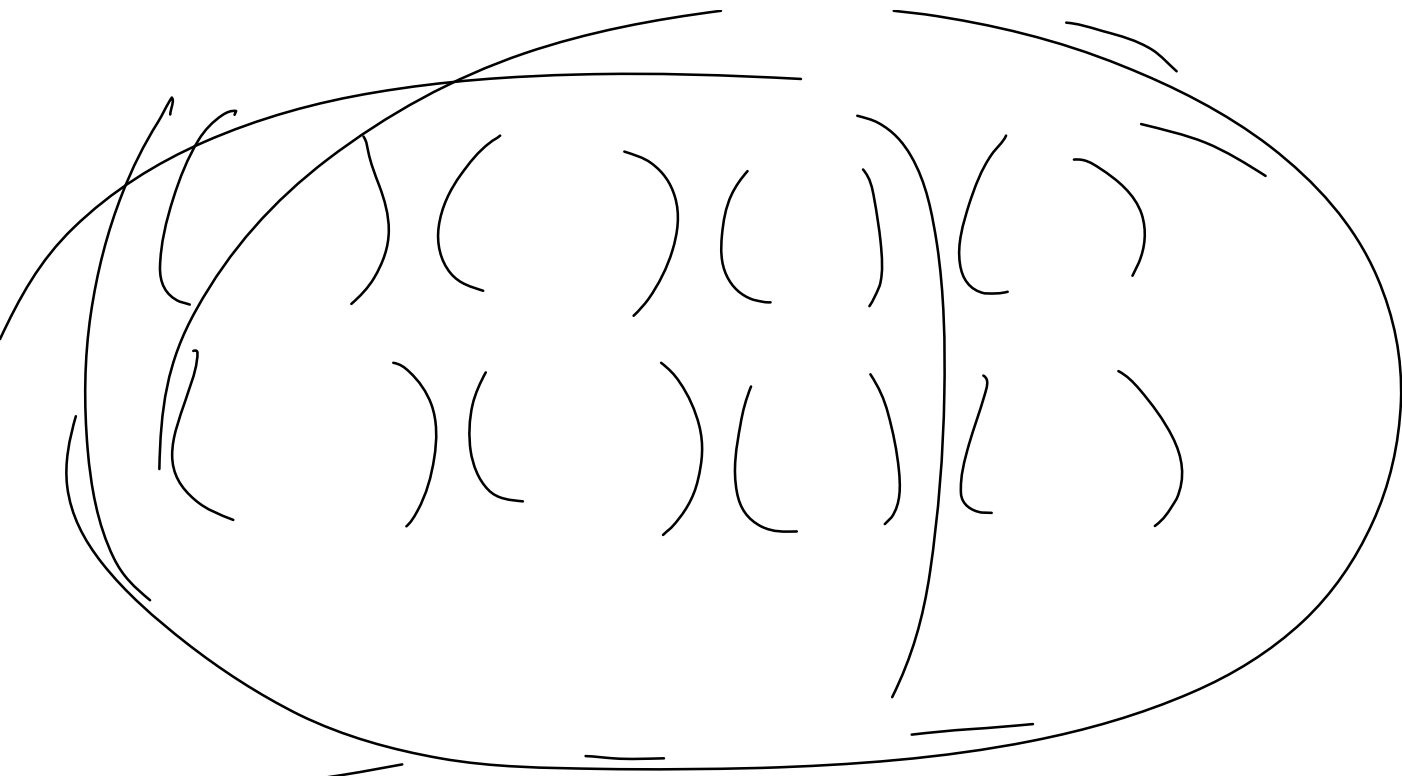
26/ Weyl

Which with

(1,2,3)  $\int$   $\cdot$   $\epsilon_{312}$  /  $\epsilon_{123}$

$\rightarrow \epsilon_{213}$  'cyclic' —

$\rightarrow \epsilon_{321}$  —



1

— —



2 like para







