(77) $-\underset{u}{dG}$

$M = S^n(r)$. $\xi_x = {}^{x}/_{\|x\|}$, $A_\xi = -\frac{1}{r}\,Id$

$R(X,Y)Z = \frac{1}{r^2}\left(g(Y,Z)X - g(X,Z)Y\right)$

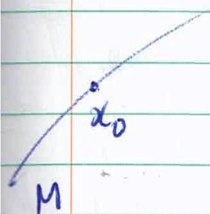
$\Rightarrow$ sectional curv. $\equiv \frac{1}{r^2}$

$$\boxed{g(B(X,Y)Z,W) = g(\alpha(X,Z),\alpha(Y,W)) - g(\alpha(Y,Z),\alpha(X,W))}$$

- $M^n \hookrightarrow \bar{M}^{n+k}$

  $\exists$ normal chart centered at x_0

  $y^1, \dots, y^{n+k}$



  s.t. $\frac{\partial}{\partial y^1}, \dots, \frac{\partial}{\partial y^n}$ span $T_{x_0}M$

In fact, we can take $Y_1, \dots, Y_{n+k}$ o.n. basis $T_{x_0}\bar{M}$

s.t. $Y_1, \dots, Y_n \in T_{x_0}M$. Take

$\left.\frac{\partial}{\partial y^i}\right|_{x_0} = Y_i$, $1 \le i \le n+k$

let $x^1, \dots, x^n$ be an arbitrary nbhd of x_0 in M. set

$y^i = y^i(x^1, \dots, x^n)$ $\quad 1 \le i \le n+k$

which defines the embedding $M \hookrightarrow \bar{M}$ locally