

"Note: We can apply the above to  $n, p$  arbitrarily. See P 67. Proposition 7. Lelong."

"Comment: If we define  $T$  real by  $\overline{T(\varphi)} = (-1)^{(n-p)+1} T(\bar{\varphi})$ , then we have  $(1,1)$ -type  $T$  real if  $\bar{t}_{ij} = t_{ji}$ .

$$\begin{aligned} & T(\alpha(\lambda_1 dz_1 \wedge \dots \wedge dz_n + \lambda_2 d\bar{z}_1 \wedge dz_2 \wedge \dots \wedge dz_n + \dots + \lambda_n dz_1 \wedge \dots \wedge d\bar{z}_{n-1} \\ & \quad \wedge (\bar{\lambda}_1 d\bar{z}_2 \wedge \dots \wedge d\bar{z}_n + \bar{\lambda}_2 d\bar{z}_1 \wedge d\bar{z}_3 \wedge \dots \wedge d\bar{z}_n + \dots + \bar{\lambda}_n d\bar{z}_1 \wedge \dots \wedge d\bar{z}_{n-1})) \\ &= T(\alpha \lambda_i \bar{\lambda}_j dz_1 \wedge \dots \wedge d\hat{z}_i \wedge \dots \wedge dz_n \wedge d\bar{z}_1 \wedge \dots \wedge d\hat{\bar{z}}_j \wedge \dots \wedge d\bar{z}_n) \\ &= \lambda_i \bar{\lambda}_j \frac{\sqrt{-1}}{2} t_{ij}(\alpha) (-1)^{n+i+j-1} \geq 0 \text{ for all } \alpha \geq 0. \end{aligned}$$

$$\Updownarrow$$

$$\frac{\sqrt{-1}}{2} t_{ij}(\alpha) (-1)^{i-1} \lambda_i \bar{\lambda}_j (-1)^{j+n} \geq 0 \text{ for all } \alpha \geq 0.$$

$$\frac{\sqrt{-1}}{2} (-1)^{n-1} t_{ij}(\alpha) \lambda_i \bar{\lambda}_j \geq 0 \text{ for all } \alpha \geq 0, \text{ if we let } \lambda_i (-1)^i = \lambda_i.$$

Forget  $\frac{\sqrt{-1}}{2}$ , since we have to multiply by  $(\sqrt{-1})^{\text{something}}$ . That's not important.  $\Downarrow$

In this case, by taking monotone limits we may extend the domain of definition of  $T(\lambda)$  to a suitable class of functions — including all the continuous functions — in  $L^1(M, \text{loc})$  that are integrable for the positive measure  $T(\lambda)$ . A similar discussion app