

## Tarea N1

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## Tarea N°1

Ejericio: Mostrar que:a

$$i)\gamma\beta=Sinh\varsigma$$
  
 $ii)\gamma=Cosh\varsigma$   
 $iii)A'_0B'_0-\vec{A'}\cdot\vec{B'}=A_0B_0-\vec{A}\cdot\vec{B}$ 



i) 
$$\gamma\beta = Sinh\varsigma$$

Sabemos que:

$$\beta = \tanh\varsigma. \tag{1}$$

$$\gamma = \frac{1}{\sqrt{1 - \beta^2}}. \tag{2}$$

## i) $\gamma\beta = Sinh\varsigma$

Por lo que:

$$egin{aligned} \gammaeta &= rac{eta}{\sqrt{1-eta^2}} \ &= rac{ anharsigma}{\sqrt{1-arsigma^2}} \ &= rac{ anharsigma}{\sqrt{ ext{sech}^2arsigma}} \ &= rac{ anharsigma}{ ext{sech}arsigma} \ &= \sinharsigma \end{aligned}$$



i) 
$$\gamma\beta = \sinh \varsigma$$

$$\gamma eta = extstyle sinh arsigma$$

(3)