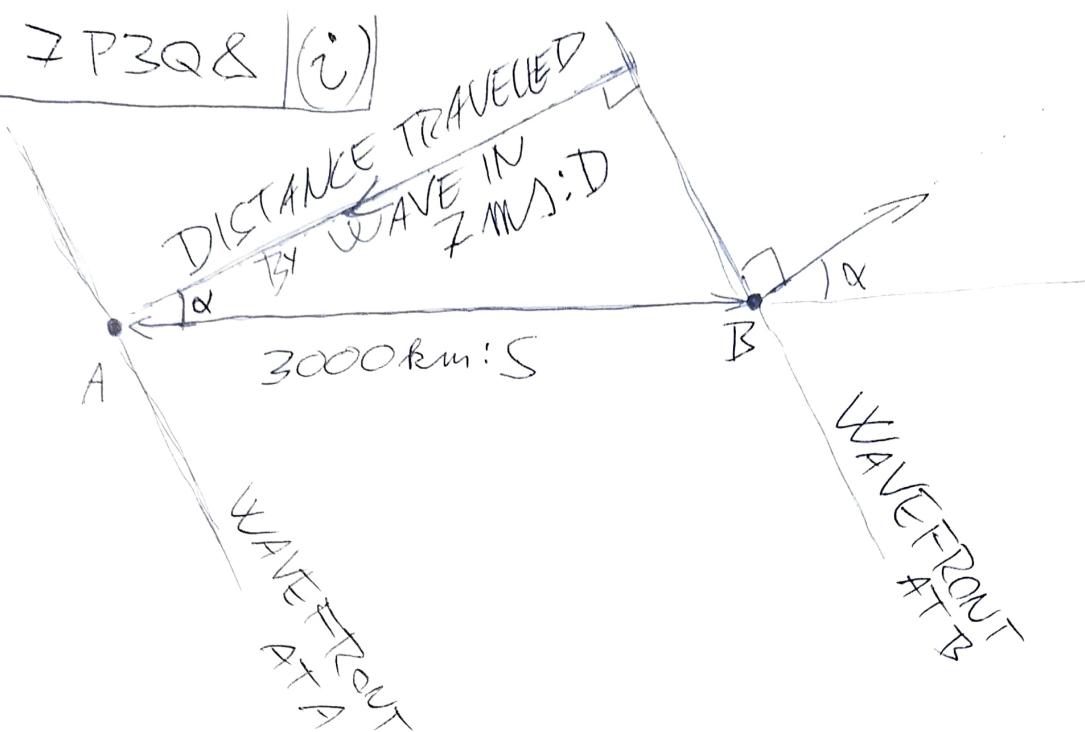


2017 P3Q8 (i)

SOURCE



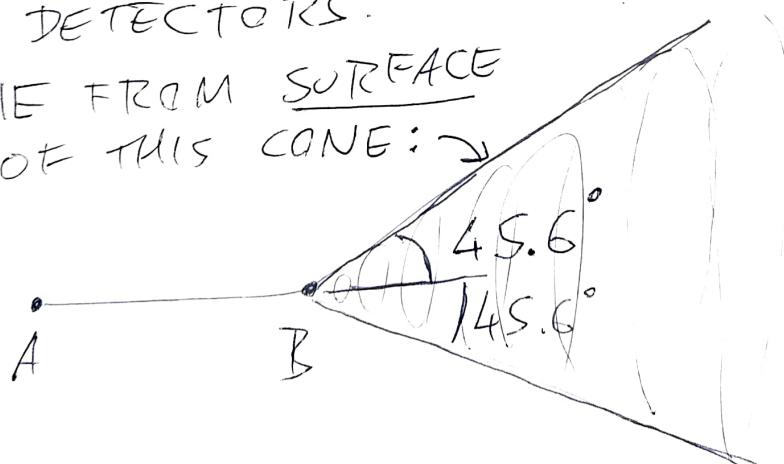
$$D = 0.007 c \approx 2.1 \cdot 10^6 \text{ m}$$

$$\alpha = \arccos \frac{D}{S} \approx 0.8 \approx 45.6^\circ$$

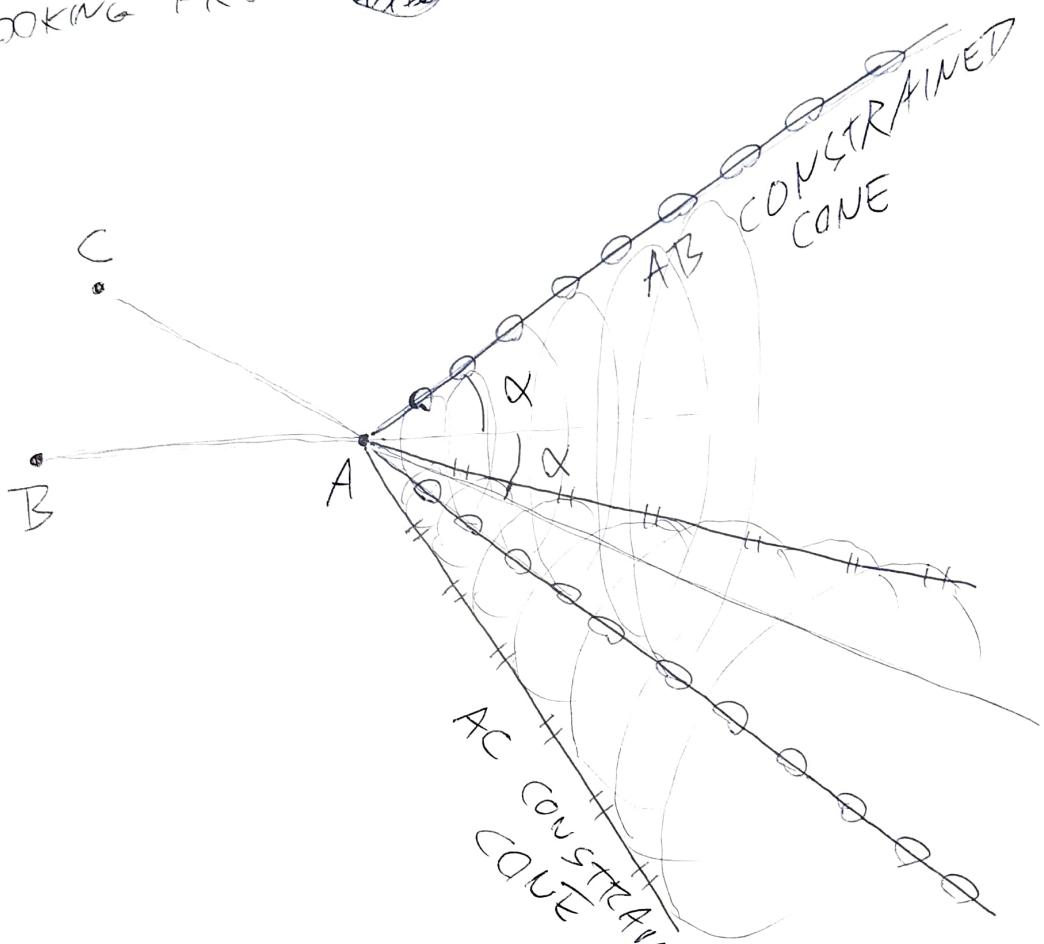
CONSTRAINT:

WAVE COULD'VE COME FROM AN ANGLE  
45.6° FROM LINE CONNECTING TWO  
DETECTORS.

IE FROM SURFACE  
OF THIS CONE:



ADDING A THIRD DETECTOR WOULD ADD  
MORE CONE-LIKE CONSTRAINTS TO THE SYSTEM.  
IE, LOOKING FROM ~~AB~~ ABOVE PLANE OF DETECTORS:



THERE IS A THIRD,  
BC - CONSTRAINED CONE,  
WHICH I HAVEN'T DRAWN  
TO KEEP THIS READABLE.

I WOULDN'T CHOOSE C TO LIE ALONG  
AB, BECAUSE THEN AB AND AC AND BC -  
CONSTRAINED CONES WOULD BE COAXIAL,  
WHICH OFFER LESS INFO THAN 3 NON-COAXIAL  
CONES.

(BY XY CONSTRAINED CONE I MEAN THE SPATIAL CONE -  
SHAPED CONSTRAINT IMPOSED BY MEASUREMENTS  
AT X & Y)