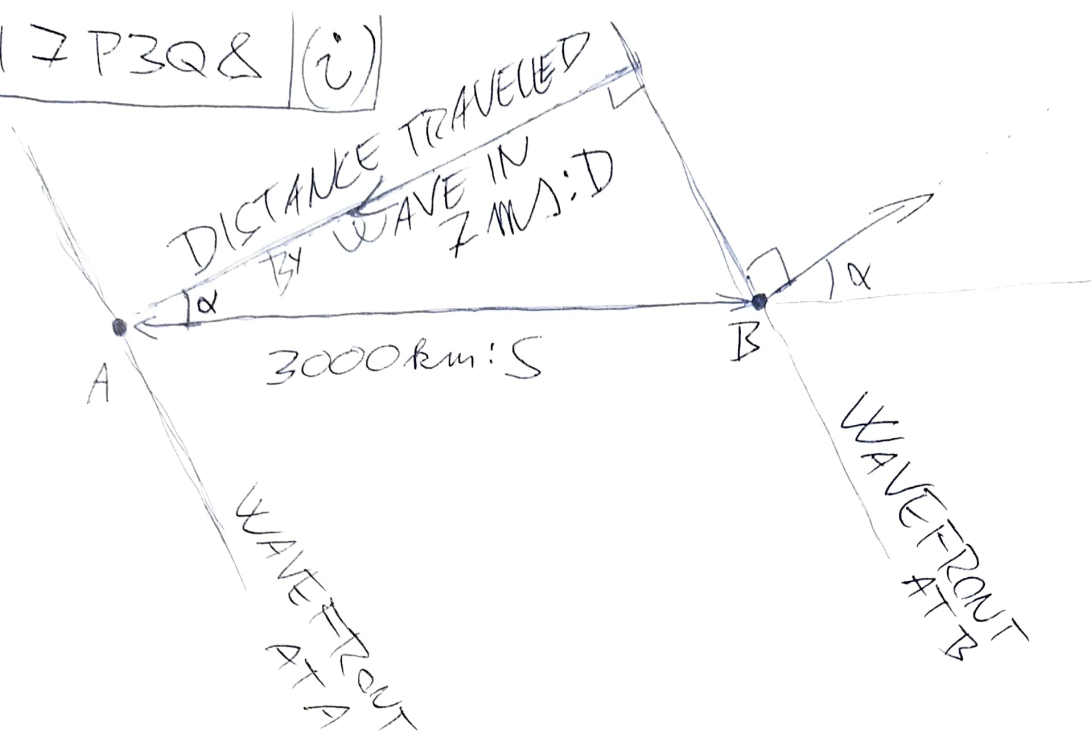


017P3Q8 (i)

SOURCE



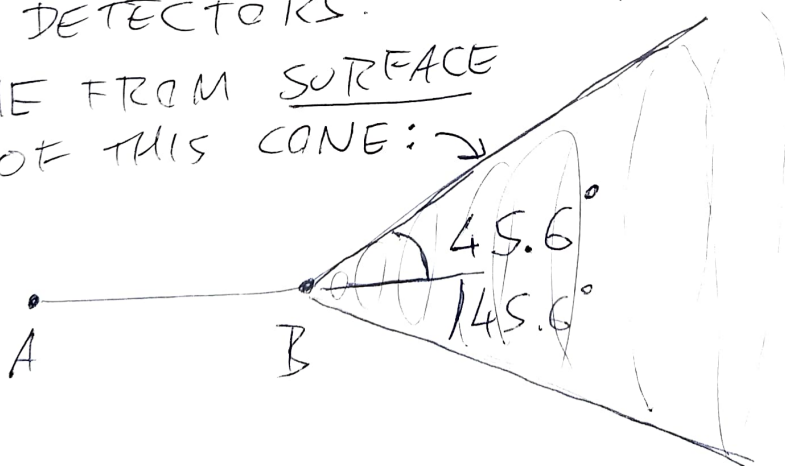
$$D = 0.007c \approx 2.1 \cdot 10^6 \text{ m}$$

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

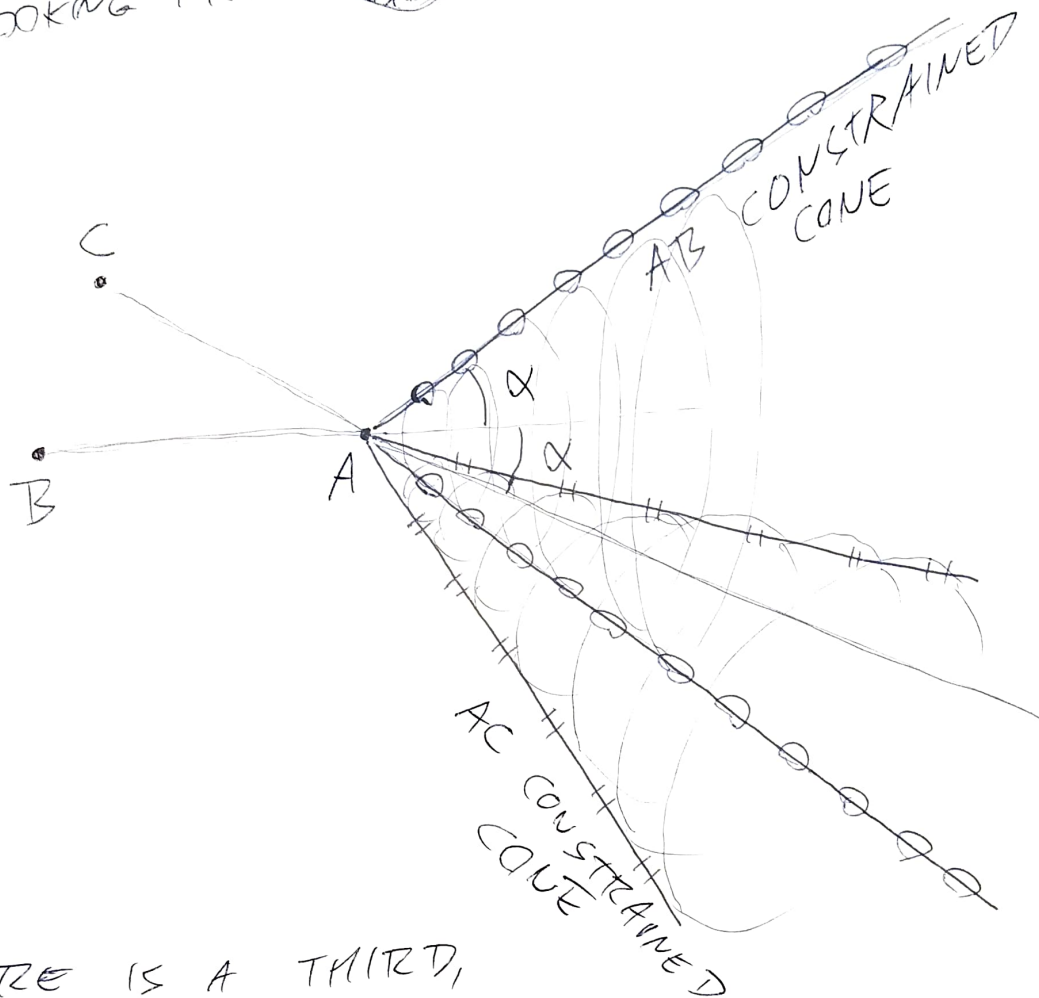
CONSTRAINT:

WAVE COULD'VE COME FROM AN ANGLE  $45.6^\circ$  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 ~~THE~~ 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.)