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A Mathematical Model of the Acoustical Properties of the Transverse Concert Flute

Division: Category:	Health Sciences Senior
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Abstract:	This project produced a model that is used to accurately estimate keyhole locations on a flute's body. Finding notes and their tube lengths, end corrections were applied to these lengths in order to accurately predict wavelength and find a correlation between frequency and tube length. This method had a small keyhole placement error of ± 0.053 m, and could be changed to suit other open tube instruments.



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