

**THEORY OF FREE STREAMLINES IN LIQUID  
FLOWS APPLIED TO CAVITATION  
PROBLEMS**

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# Dedication

*To my father  
brothers, sisters,  
and friends .*

## ***Acknowledgment***

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his advice to carry out this research.*

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# ***Abstract***

*We first give a survey of conformal mappings on the complex plane. Then a general study of cavitation is given. This is followed by a discussion of free streamlines in various two dimensional examples of liquid flow*

*Finally we give application of the theory to some cavitation problems.*



بدأنا البحث بدراسة شاملة عن التحويلات الحافظة للزوايا في المستوى المركب.

وبعد ذلك عرض البحث دراسة عامة عن التفريغ في السوائل المتحركة .

تلي ذلك مناقشة عن خطوط التيار الحرة في عدة أمثلة من انسياب السوائل في

بعدين .

اخيراً طُبقت هذه النظريات علي بعض مسائل التفريغ في السوائل المتحركة .

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