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An inverse problem of determining the shape of rotating body by temperature measurements

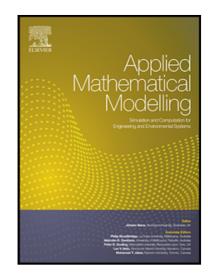
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Highlights

- A new indirect way is proposed in the paper to reconstruct the shape of rotating body by temperature measurements;
- The original problem is transformed into an inverse coefficient problem which is known as severely ill-posed and nonlinear;
- The uniqueness of the original solution is proved and then the ill-posedness is overcame by using the optimal control method;
- Numerical implements are performed to show the validity of the proposed method.



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