## **Accepted Manuscript**

An isogeometric-meshfree coupling approach for contact problems by using the third medium method

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PII: S0020-7403(18)31501-7

DOI: https://doi.org/10.1016/j.ijmecsci.2018.08.031

Reference: MS 4489

To appear in: International Journal of Mechanical Sciences

Received date: 8 May 2018
Revised date: 9 August 2018
Accepted date: 23 August 2018



Please cite this article as: Jiazhao Huang, Nhon Nguyen-Thanh, Kun Zhou, An isogeometric-meshfree coupling approach for contact problems by using the third medium method, *International Journal of Mechanical Sciences* (2018), doi: https://doi.org/10.1016/j.ijmecsci.2018.08.031

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#### ACCEPTED MANUSCRIPT

### **Highlights**

- The proposed approach avoids the complexity of the standard contact enforcement methods.
- The contacting bodies never overlap each other and the third medium always remains between them even in the highly compressed region.
- The present method preserves geometry exactness of the contact surfaces with high order discrezitaions and eliminates computational expensive remeshing process.
- Distortion mesh and accuracy in estimating the contact forces can be managed by selecting appropriate material parameters.



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