

Titan's interaction with Saturn's magnetosphere

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Abstract

In this brief non-systematic literature review we attempt to summarize the scientific knowledge about Titan's interaction with the Kronian magnetosphere.

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1 Introduction

1.1 Missions to Saturn

1.2 Saturn's magnetosphere

1.3 About Titan

2 Titan's interactions with Saturn's magnetosphere

2.1 Titan's induced magnetosphere

2.2 Energetic particle interactions

(Blanc et al., 2005) 2005, January 1 (Kivelson & Bagenal, 2014)

3 Conclusions

References

- Blanc, M., Kallenbach, R., & Erkaev, N. V. (2005). Solar system magnetospheres. *Space Science Reviews*, 116, 227–298. <https://doi.org/10.1007/s11214-005-1958-y>
- Kivelson, M. G., & Bagenal, F. (2014). Chapter 7 - planetary magnetospheres. In T. Spohn, D. Breuer, & T. V. Johnson (Eds.), *Encyclopedia of the solar system (third edition)* (Third Edition, pp. 137–157). Elsevier. <https://doi.org/10.1016/B978-0-12-415845-0.00007-4>