



WHY EXOMOONS ARE SO IMPORTANT AND HOW WE'RE GOING TO FIND THEM

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Moons are common in the Solar System and so we expect them to be abundant in other planetary systems too ("exomoons"). By the same token, we expected exoplanets to be common and yet their discovery has transformed astronomy, upending our ideas of planet formation suggesting an uncommon origin of our own home. Exomoons hold much promise, with already multiple hints of their existence and diversity. I'll discuss why they're going to become a major topic of study in the years to follow, influencing everything from our theories to our observations. I'll highlight the unique science that they enable, and how we think we will detect them. Thanks to JWST and future facilities, we are finally at the threshold where these cosmic enigmas will have no place left to hide, opening the door to a whole new enterprise in astronomy.

08-OCT-2024

3:30 PM ET

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