

> The deuterium chemistry in a protoplanetary disk
>
> K. Willacy, and W. D. Langer
>
> Jet Propulsion Laboratory, California Institute of
> Technology, 4800 Oak Grove Dr, Pasadena CA 91109}

> ABSTRACT

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> We present chemical models of protoplanetary disks
> which include simple deuterated molecules.
> We find that the D/H ratios can be very high
> (in agreement with observations of disks)
> and are greatly affected by chemical processing
> on dust grains.
> Deuterium observations are used in the solar
> system to investigate the origin and history of
> planetary atmospheres and of comets. An understanding
> of the chemistry of these molecules is therefore
crucial to our understanding of the evolution
of planetary systems.

K. Willacy's research is supported as an NRC
Postdoc Associate, and this research is also supported by
by the National Aeronautics and Space
Administration under research grants to JPL.