

Abstract Submitted  
for the MAR09 Meeting of  
The American Physical Society

**Absorption spectrum of**  
**the Single Molecule Magnet [Ni(dbm)(MeOH)Cl]<sub>4</sub>**<sup>1</sup> DANIEL J. ARENAS,  
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ifornia at San Diego — The room temperature optical absorption of the single-  
molecule magnet [Ni(dbm)(MeOH)(Cl)]<sub>4</sub> has been measured in the near-infrared-  
visible spectral region. The spectra show a strong absorption band around 3 eV  
and bands characteristic of d-d transitions in nickel. The results will be compared  
to various theoretical models in the literature; including DFT and DFT+*U* calcu-  
lations [*Phys. Rev. Lett.* **100**, 167206] that predict different energy gaps for the  
HOMO to LUMO optical transitions.

<sup>1</sup>Supported by the DOE through DE-FG02-02ER45984 and by the NHMFL

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Date submitted: 21 Nov 2008

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