

KIPT, June 14-15, 2004

## Competing charge order, glass and liquid in organics

1/4 -filled band system

$(\text{DI-DCNQI})_2\text{Ag}$  (Quasi-1D)

Charge ordering vs melting

Controlled by transfer integral

$\theta\text{-}(\text{ET})_2\text{X}$  (triangular lattice)

Charge ordering vs charge glass

Controlled by lattice symmetry

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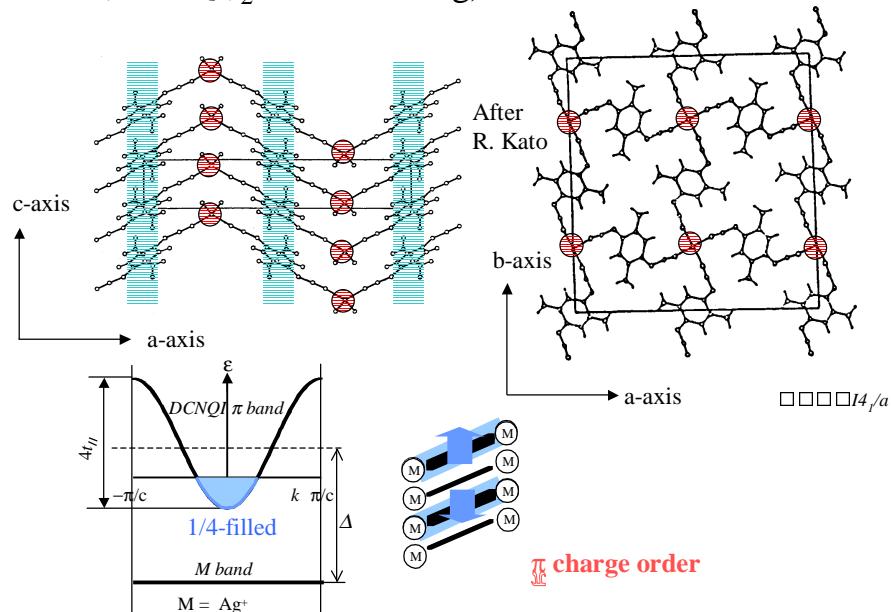
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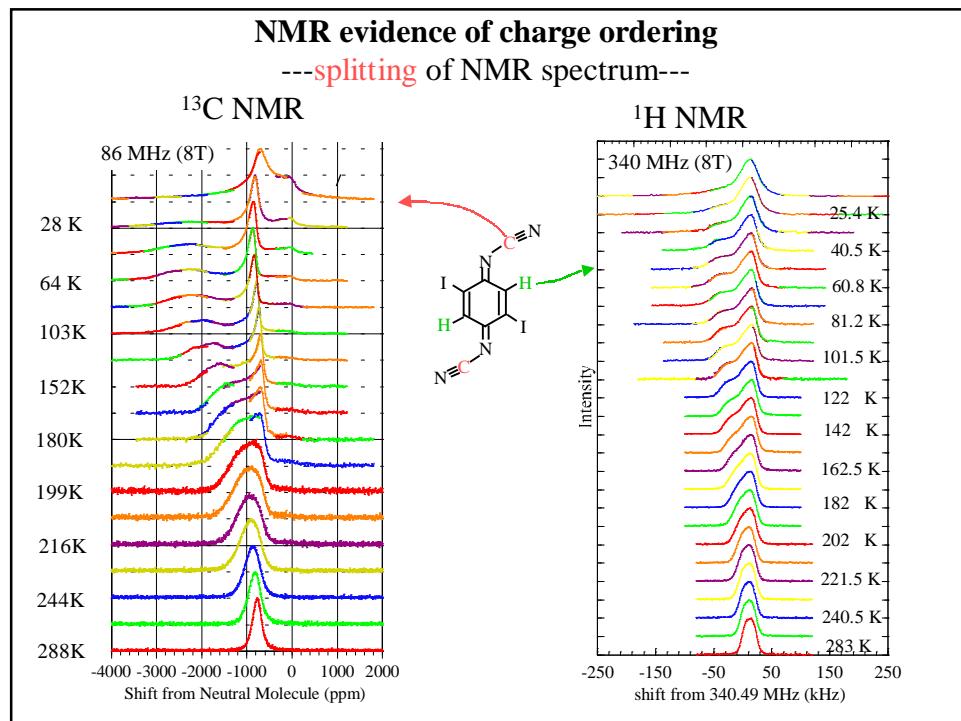
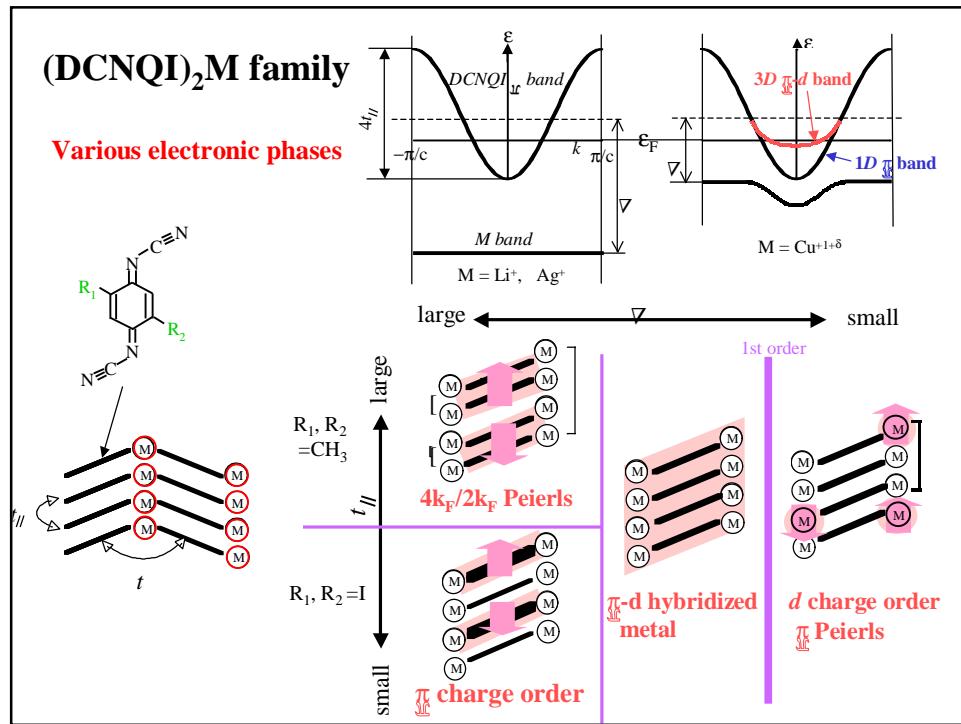
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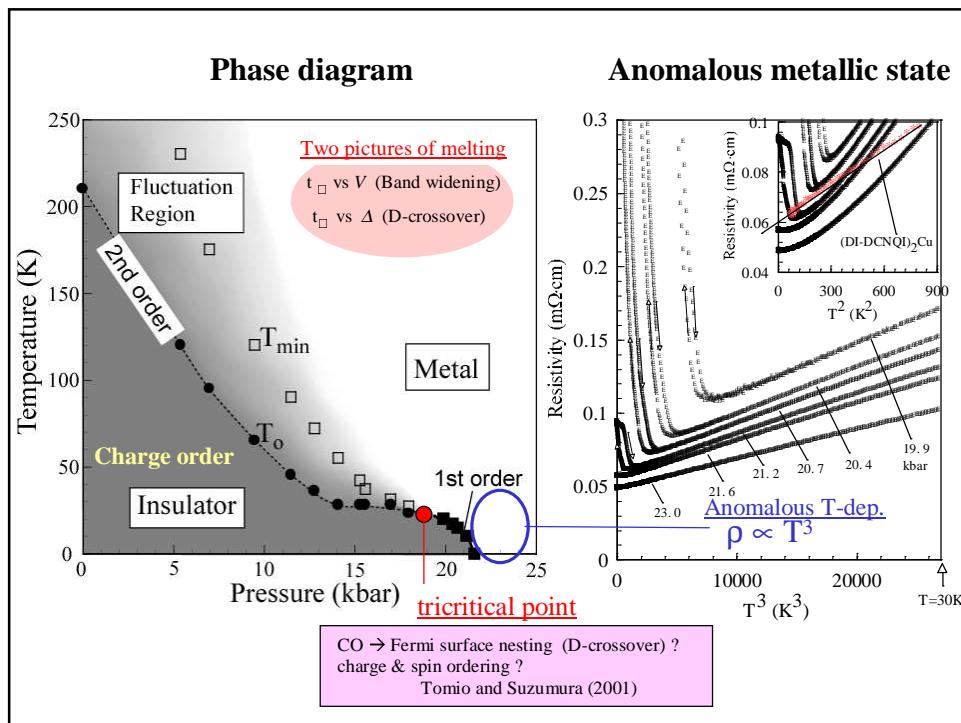
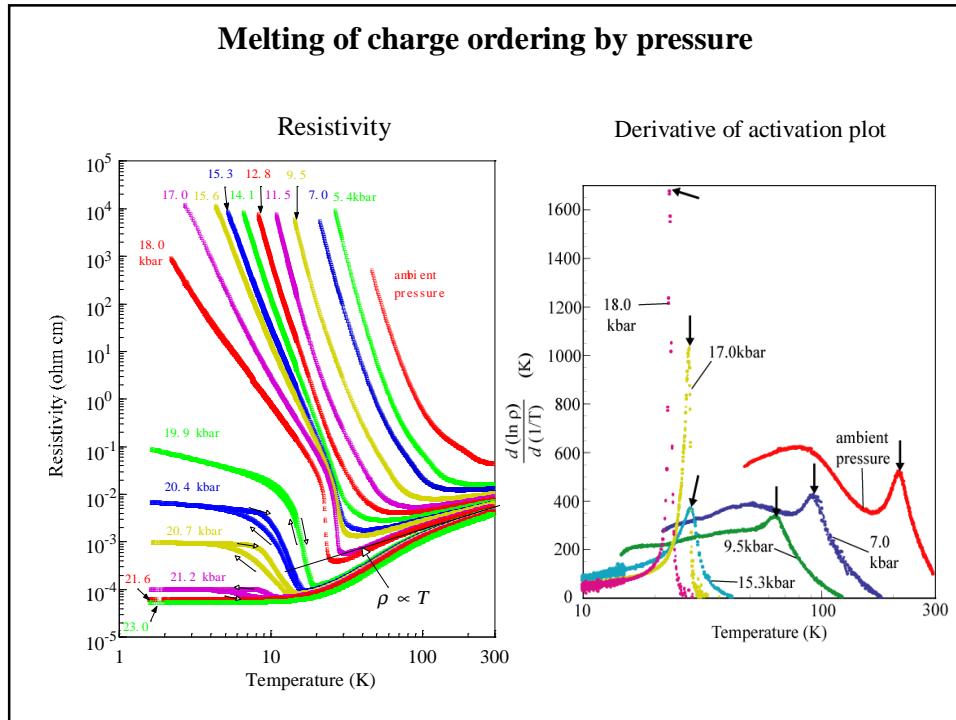
$(\text{DCNQI})_2\text{M} \square \square \text{M} = \text{Ag}$



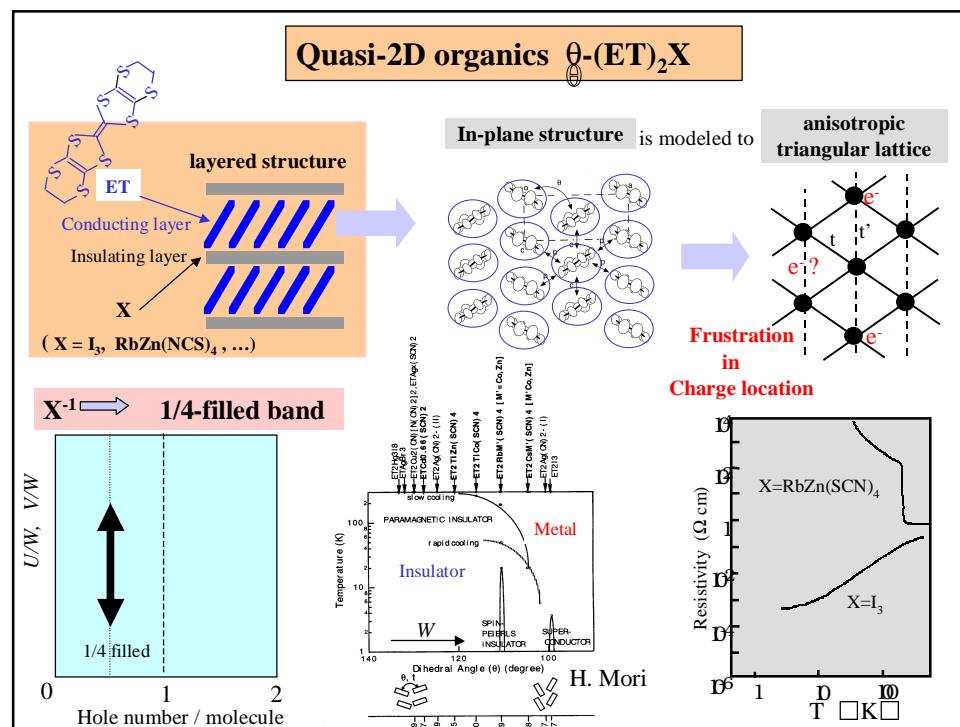
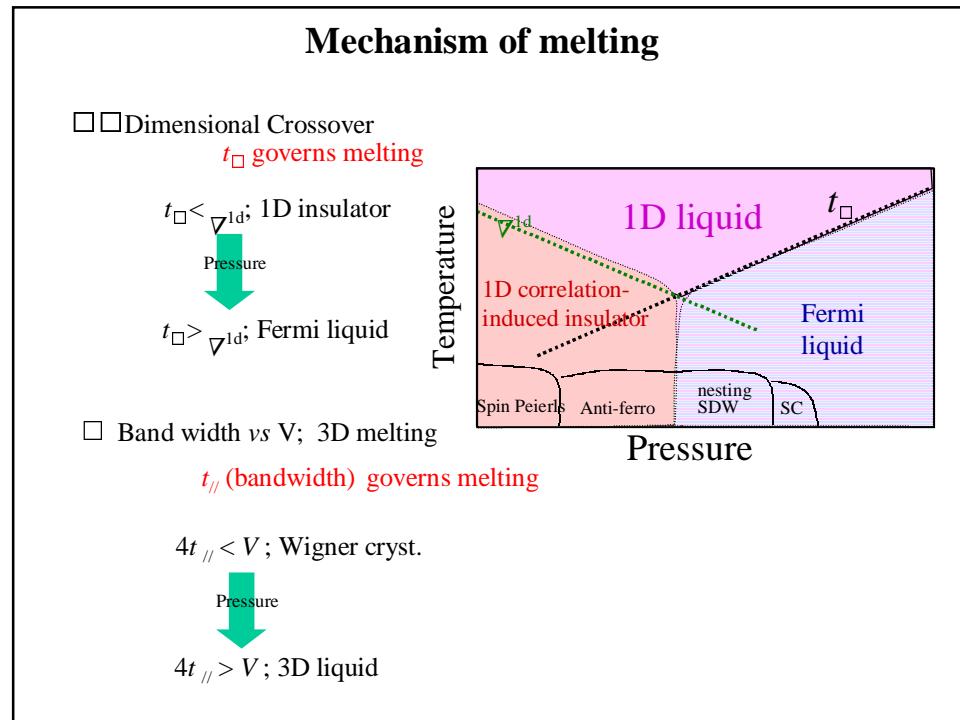
# Discussion on 2d Organics with Triangular Lattice Structure



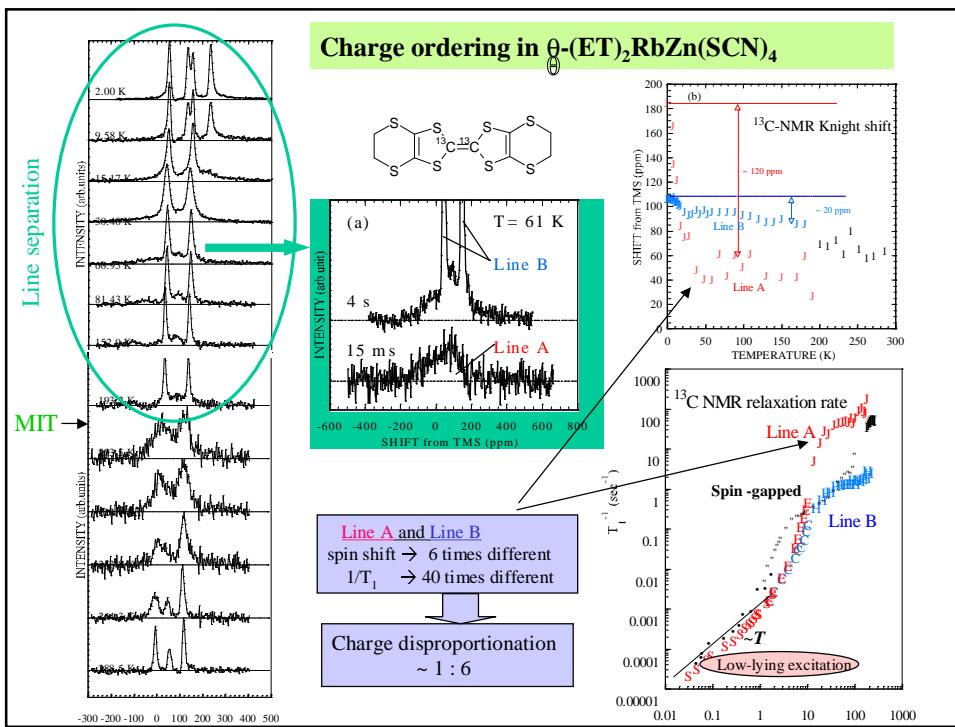
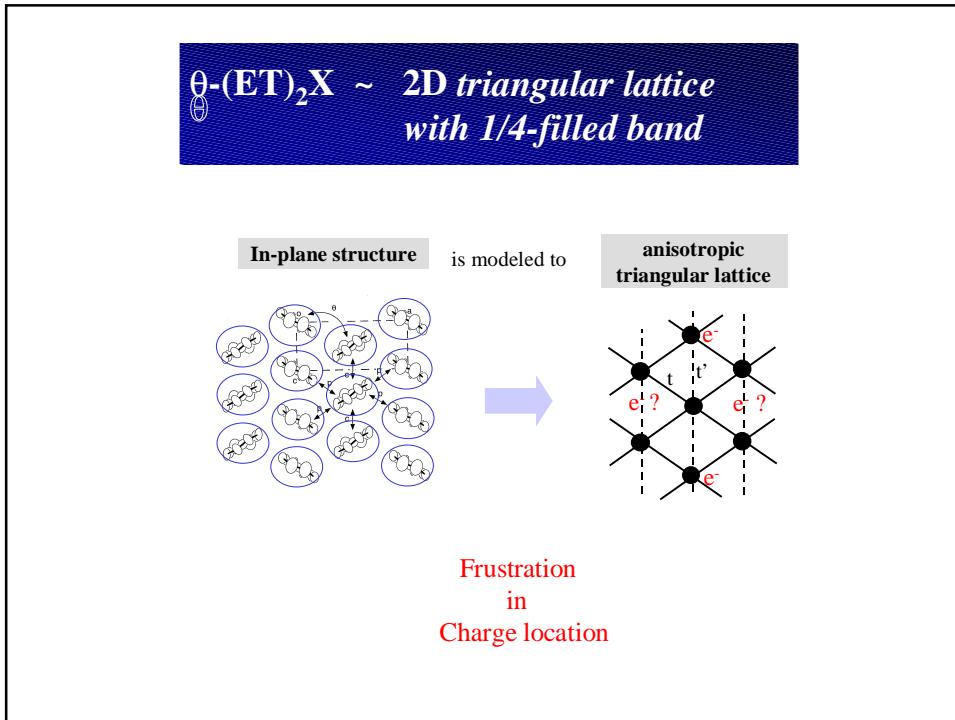
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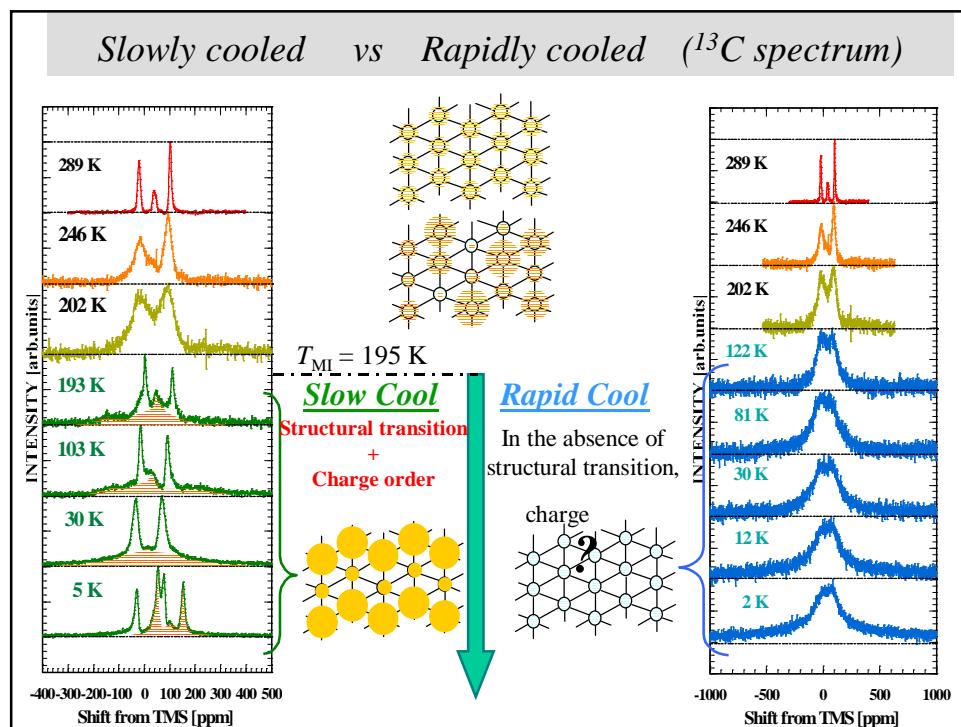
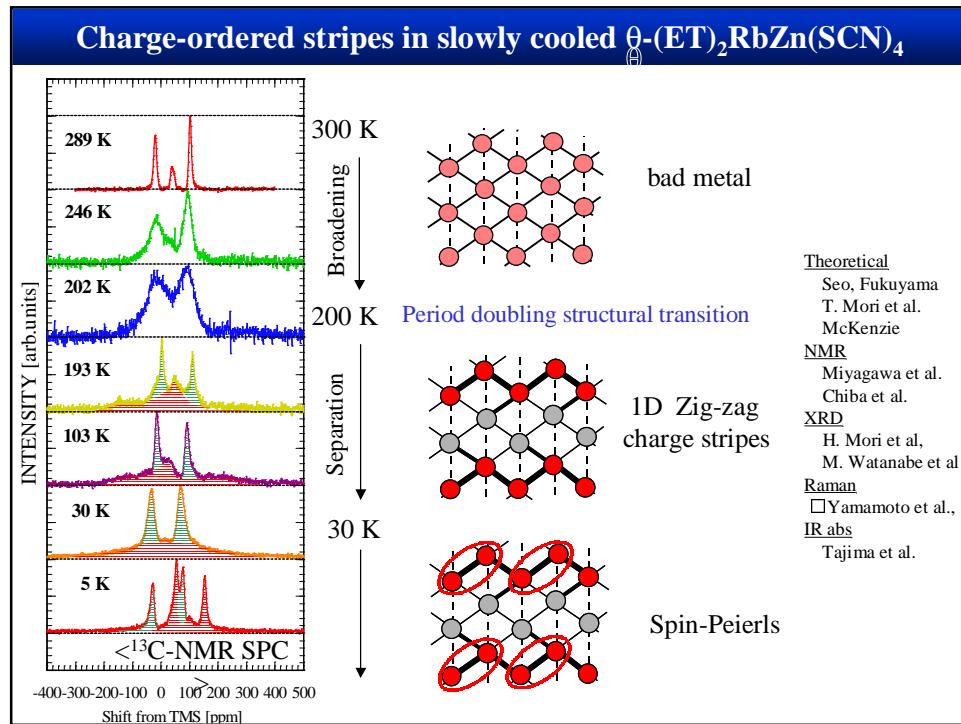
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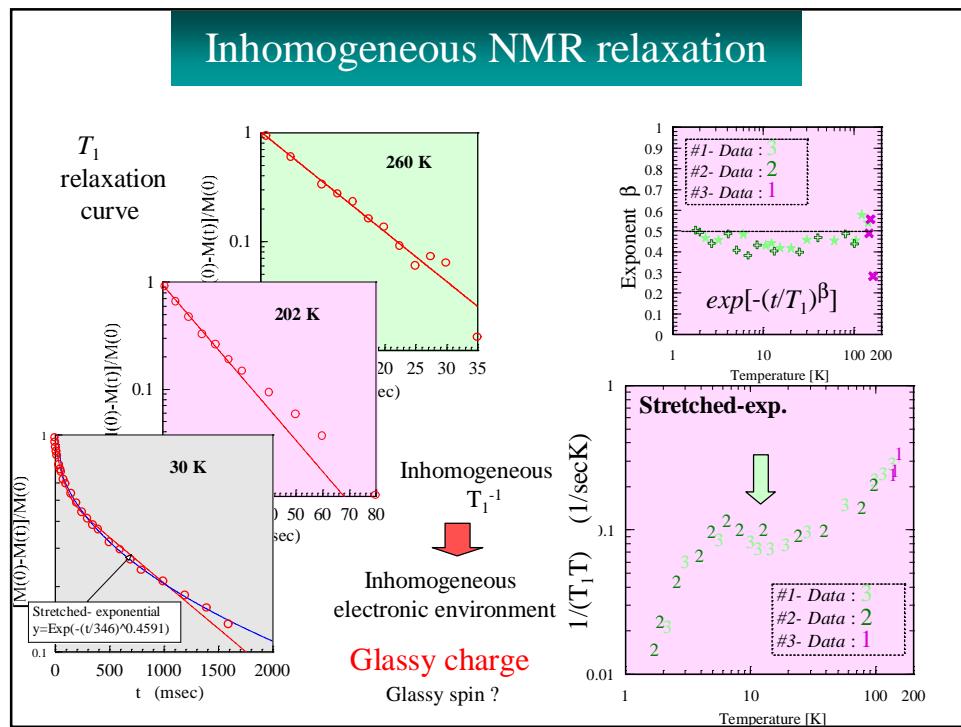
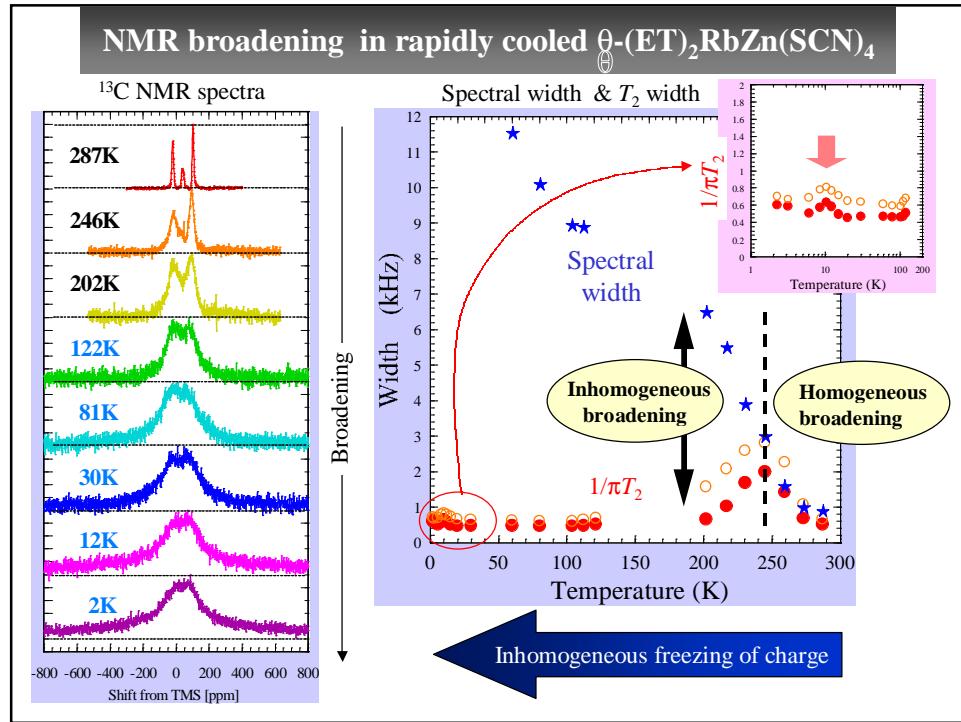
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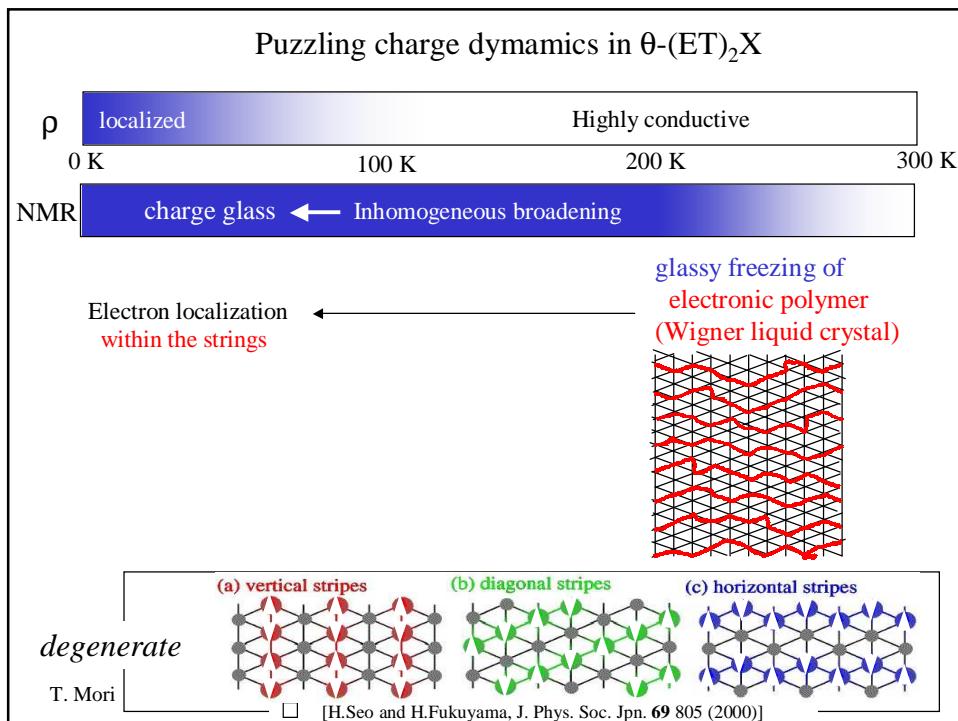
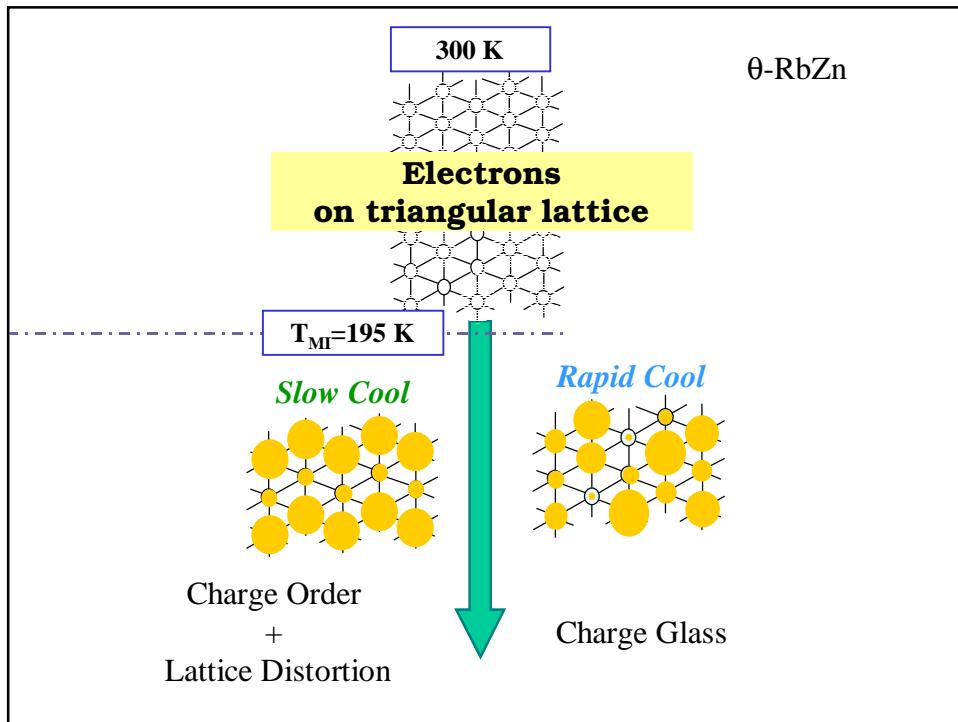
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**Charge on triangular lattice  
in  $\theta$ -(ET)<sub>2</sub>MZn(SCN)<sub>4</sub>**

Electronic polymer

Order      glass

*Charge-lattice coupling*

quantum melting