

Blue: DSW comments.

How about an introduction? I'm about to talk about....

..... standard intro to Hamiltonian mechanics in  $T^*M$ .

The correspondence  $\{H\} \leftrightarrow \{X_H\}$  is encoded by

a 2-form  $\omega = \sum_{i=1}^n dp_i \wedge dq_i$ , using

$$\omega(X_H, \cdot) = -dH$$

properties of  $\omega$ :

- 1. closed
  - 2.  $\omega^N$  is a volume form.
- } "symplectic form"

Def  $L \subset T^*M$  is Lagrangian if .....

Examples: 1. the 0 section.

2. The graph of  $df$  for  $f: M \rightarrow \mathbb{R}$

..... "the nearby Lagrangian Conjecture".

Microlocalization (Nadler-Zaslow 2006) correspondence

between  $\{ \text{constructible sheaves on } M \}$  and

$\{ \text{exact Lagrangians in } T^*M \}$

4:42: "The goal of this talk ....."