

Let  $(M, \omega)$  be a symplectic manifold.

		A	B
1. Hamiltonian vector field	$X_H$ by	$i_{X_H} \omega = dH$	$i_{X_H} \omega = -dH$
2. Poisson bracket :	$\{F, G\} =$	$\omega(X_F, X_G)$	$\omega(X_G, X_F)$
3. Representation	$[X_F, X_G] =$	$-X_{\omega(X_F, X_G)}$	$X_{\omega(X_F, X_G)}$
4. Lie derivative : $L_{X_F} G =$	$X_F G =$	$-\{F, G\}$	$\{F, G\}$

SOURCE	1. $X_H$	2. $\{, \}$	$\Rightarrow$	3. $\pm X_{\{F, G\}}$	4. $\pm X_F G$
Our course, * ABRAHAM - MARSDEN	A	A	$\Rightarrow$	A	A
SMIATICKY HOFER	B	B	$\Rightarrow$	A	B
WOODHOUSE LIBERMAN - MARLE	B	A	$\Rightarrow$	B	B
BRYLINSKI	A	B	$\Rightarrow$	B	A