Open questions

Q. How to detect flexibility? \( \Rightarrow \text{SH}^-(X) = 0 \).

Q. When is a lefticket function flexible? (\( A_n \) type).

Q. Is there a notion of flexibility for a lefticket function?

Q. Are the Maydakiy - Seidel examples flexible? \( \text{Cell have } \text{SH} = 0 \).

Q. Is this flexible?

Q. When is an affine alg variety flexible?

Reps all vs. subflexible.

Also, is there an algebraic definition of flexibility?

Q. Examples? (what kind?) we like to co-pick with if so?:

W\text{Fuk} (A_n, kZ) \hspace{1cm} (\text{also go W\text{Fuk} (\_\_)})

Q. Criterion for no compact lagrangians?

(\Rightarrow \text{Lef} has \text{no flat reps} \Rightarrow \text{what slope}?)

Q. Semi-local obstruction? (\text{semi-local obstruction}?)

Q. Higher variants?

Q. Action size (Euler char.

\text{Novikov})

\text{H}_2 (\text{Nov.})

\text{H}_2 / \text{bundle}

\text{contract}.

Q. Symp, Igor Vaisman? (1404.7128 \Rightarrow \text{SH}(\text{L}))
If $W$ is flexible, then $\pi_0 \text{Symp}(W) \cong \pi_0 \text{Diff}_c^J(W)$.

Q: What about $\text{Symp}(W)$ vs. $\text{Diff}_c^J(W)$?

A: Which $A_n$ diagrams are algebraic?

(growth rule: Mclean's)...

\[
\lim \inf \frac{\log r_k \text{ SH}_0}{\log L} \leq \text{dist}_c \quad \text{for algebraic varieties}.
\]

A specific, e.g.,

Mclean:

\[
(\forall \gamma, \delta \Rightarrow \text{ SH}_0 \neq 0).
\]
Q: Is every simply-connected flexible W6 algebraic?

(by build $W^6$ is $\mathfrak{sl}_n$, An diagram).

Q: Are all flexibly unfolded algebras?

Q: Is a random variety flexible?

$k = \infty$

Q: Are non-isolated Milnor fibers ever flexible? (sometimes...)

(i.e. $xy^k - z^2 - w^2$ is flexible non-isolated)

$P^4(1)$.

Q: Does $\lambda$ go more general (L.E.) (non-An)?

(kore-Russell)

Q: Does $\{x(y-1) = z^2 + w^2\}$ have the flexibility?

Inf.

Cohom.

but unknown if

$X_{KR} \cong C^3.$

or even

$X_{KR} \cong C^3_{hol}.$

Q: Are there alg. varieties which are deblob, away as sung. unfold but not through alg. varieties?

i.e. $\{xy^k = z^2 + w^2 + 1\}$ (implies alg. open with analytic $\Theta$-soft, but not clear though polar $\Theta$-soft)
Equivalence up to zero sets.

?? polynomial Θ-sets.

Some difference: factor + projective compactification

(?? kind of compactifications?)

Mark: $\mathbb{C}^4$ vs. contractible $\mathbb{C}^3 \times \mathbb{C}$. Could work

maybe there is algebraically rigid