

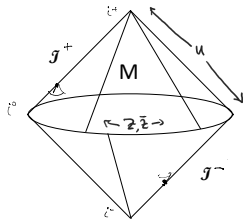
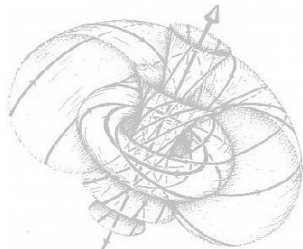
Twistor theory & beyond.

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80's Conformal Geometry and invariants

Rod From GJMS operators to Q-curvature to conformally invariant theories in 6d.

Claude Incredibly precise classification of Einstein geometries on del Pezzo surfaces from $\det W^+ > 0$ and Bochner arguments.

Jurek CR geometry of algebraically special space-times and global conformal geometry of Kerr-NUT-dS.

- Dave** Adapting Costello-Yamazaki-Witten to twistor space yields quantum integrability—a longstanding goal from the '90s.
- Prim** Dispersionless integrable systems and quadric ansatz for Einstein-Weyl spaces (& Painlevé).
- Ian** Bridgeland stability conditions from Plebanski equations and their Moyal deformations.
Relates also to GMN gauge theories and strong coupling ideas from Alday-Maldacena.
- Paul** half type-D are integrable!
(Applications to black hole stability?)

Super Yang-Mills:

Nastia Beautiful cluster algebra and quiver structures in multiloop amplitudes and their symbols.

Jara Amplituhedra from weak to strong coupling.

Lance Form factors via bootstraps at 8 loops!

Gravity:

Zvi Twistors for gravity waves from black holes collisions!?!

'10's Strings and (ambi-) twistors

George Every space of null geodesics gives a Einstein-Kähler space! (Light rays are strings?!?)

Eduardo Review of twistors and strings.

Yvonne Bridges between true string, ambitwistor-string and field theory amplitudes.

Nathan Twistors for the true-string in $\text{AdS}_5 \times S^5$.

Thanks to all my collaborators

Graduate students (many now postdocs or faculty):

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Lane Hughston, Nick Woodhouse, Ted Newman, George Sparling, Robin Graham, Paul Tod, Claude LeBrun, Chris Hull, Paul Heslop (Underpinned by Roger Penrose.)

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- Tim Adamo
- Maciej Dunajski
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