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Appoint

To whom who are concerned,

David Holcman was one of my students. In his thesis he studied on compact manifolds (with boundary or without) nonlinear elliptic equations with Sobolev critical exponent, and he found conditions for the existence of solutions which change sign. All these results are very good.

Under some conditions, he solved in the positive case, the prescribed scalar curvature problem on complete manifolds (not compact); in some cases the new conformal metric is complete. At the moment there are many studies on this topic, Holcman's answers are original.

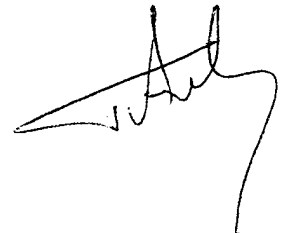
He has also other nice results, such as this on the mass of manifolds with boundary and these on PDE with vector field when a parameter of viscosity tends to zero. Recently he computed explicitly the wave kernels of some second order subelliptic operators. I did not see his last works.

D. Holcman is an excellent mathematician with great imagination. He is able to attack new problems, to conceive hard proofs and to see through difficult computations. He has many ideas to continue his research.

I am quite certain that D. Holcman will continue to do deep work.

I strongly support his application.

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