Povzetek

Zvezno preslikavo $f : \overline{D} \to \mathbb{C}^N$, holomorfno na notranjosti zaprtega enotskega diska $\overline{D} \subset \mathbb{C}$, imenujemo analitičen disk. Množico $f(\partial D)$ imenujemo rob analitičnega diska f. S pomočjo rešitve Riemann-Hilbertovega robnega problema bomo analitičnemu disku z robom v maksimalno realni $\mathcal{C}^2$ podmnogoterosti $M \subset \mathbb{C}^N$ priredili cela števila $\kappa_1, \ldots \kappa_N$, ki jih bomo imenovali parcialne indekse M vzdolž $f|_{\partial D}$. Izkaže se, da lahko v primeru, ko so vsi parcialni indeksi večji ali enaki -1, v okolici f opišemo strukturo množice analitičnih diskov z robom v M. To je tudi glavni rezultat, ki ga bomo v tem delu obravnavali.

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