

# Lenses on very curved zones of a singular line field of $\mathbb{C}^2$ or of a singular plane field of $\mathbb{C}^3$

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We renormalize, using suitable lenses, small domains of a singular holomorphic line field of  $\mathbb{C}^2$  or plane field of  $\mathbb{C}^3$  where the curvature of a plane-field is concentrated. At a proper scale the field is almost invariant by translations. When the field is integrable, the leaves are locally almost translates of a surface that we will call *profile*. We also generalize a result of Merle ([Me]) concerning the contact order of generic polar curves with the singular level  $f = 0$  when  $\omega = df$ . On the way we obtain some classical results (Lê's carousels) on the knot  $K = (\{f = 0\} \cap B_\epsilon(0, 0, 0))$  in dimension 2 and a maybe less classical ones in dimension 3 .

## References

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