

# STABLE FRONTS FROM THE THIRD DIMENSION

C. Muñoz - Cabello  
University of Valencia (Spain)

$$(u, v, t^2, t^3)$$

$$(u, v, t^2, t^5 + ut^3)$$

$$(u, v, t^3 + ut, t^5 + vt^4 + 2uvt - 5u^2t)$$

$$(u, v, t^3 + 3ut, t^4 + 2ut^2)$$

$$(u, v, t^4 + 8tu, t^7 + t^5 + t^3v(5 - 14v) + t^2u(5 - 42u) - 28tu^2)$$

$r$  plane curve } frontal  
+  
f, g unfoldings } same f#g

GENERATING STABLE FRONTS

$r$  plane curve } frontal  
+  
 $\Gamma$  versal unfolding } reduction  
 $h^* \Gamma$

$f$  is  $\mathcal{A}$ -stable if all frontal unfoldings are trivial

STABILITY

$f: (\mathbb{C}^n, s) \rightarrow (\mathbb{C}^{n+k}, 0)$  stable  
 $\iff$   
 $f_i: (\mathbb{C}^n, s_i) \rightarrow (\mathbb{C}^{n+k}, 0)$  stable  
+  
 $\mathcal{A}(f_i), \dots, \mathcal{A}(f_r)$  general position

smooth field of hyperplanes tangent to the image

FRONTAL MAP GERMS

$f$  frontal &  $g = \mathcal{H} \circ f \circ \phi^{-1}$   
 $\implies g$  frontal