For $b=(b_1,b_2)\in(h=0)$, since $\Delta^2-(h=0)$ is open and $(h=0)$ is nowhere dense, $\exists$ $b_n \longrightarrow b$ s.t $b_n \in \Delta^2-(h=0)$.

$$\int_0^1 \frac{1}{h(\ \ )}\frac{dh}{dt}dt = \ln h(b_n) + i\theta_n \swarrow \text{argumnt}$$
$$- \ln h(\eta_0) - i\theta_0 .$$

$$\Rightarrow e^{\int_0^1 \frac{1}{h(\ )}\frac{dh}{dt}dt} = e^{\ln h(b_n)} e^{i\theta_n} C \swarrow \text{constant}$$

$\Rightarrow$ As $b_n \longrightarrow b$, $|h(b_n)| \longrightarrow 0$. $\Rightarrow e^{\ln h(b_n)} \longrightarrow 0$

$$\Rightarrow e^{\int_0^1 \frac{1}{h(\ )}\frac{dh}{dt}dt} = e^{\int_{\eta_0}^{b_n}\partial\log h} \longrightarrow 0 \quad \text{as } b_n \longrightarrow b.$$

$\Rightarrow$ Locally, $e^{\int_{\eta_0}^{z}\partial\log h}$ is bounded $\Rightarrow$ it is extended to Δ^2 by Riemann extension theorem.

Note that $(e^{\int_{\eta_0}^{z}\partial\log h}=0) = (h=0)$.
This proves that $(e^{\int\theta}=0) = f(M)$.

"Comment on the path-connectedness of $\Delta^2-(h=0)$.
In $\mathbb{C}^2$, let $(z_1=0)$, which is the z_2-plane.
Given two points (a_1,b_1) & $(a_2,b_2)\in\mathbb{C}^2-(z_1=0)$,
$a_1\neq 0\neq a_2$.
$\Rightarrow$ $\exists$ a path $\alpha : [0,1] \longrightarrow \mathbb{C}$ s.t
$\alpha(t)\neq 0$ $\alpha(0)=a_1$, $\alpha(1)=a_2$ since $\mathbb{C}-\{0\}$ is path-connected. $\Rightarrow$ Consider a path $\beta:[0,1]\to\mathbb{C}^2$