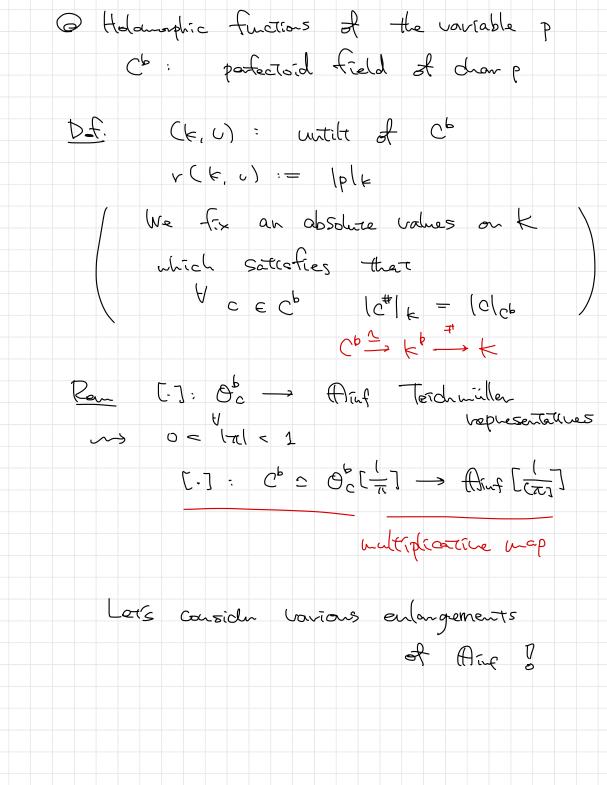
perfected sentuar 10/11/2020 perfected field of Lat Cb be a char p. perfectoid geometry Complex analysis unit disk in C ? untiles of Cb?/~ $\langle f = \sum_{N \geq 0} C_N \geq^n |$ $|C_N| \leq 13$ Act the ving of B Ca,67 holo, fine. on the annulus 12 ECI a = (2/= 6) the ving of hdo. Increass on the punctued disk { z e C l o < (z l < 1)

Def. The Fargues Fortaine curve of do is the scheme Phoj (DB (9=P)) where of is an automorphism induced by the trobenius map of Co · B = P = } 2 ∈ B (P(x) = P x } Q Today's Arm - Construct the ring B = lin B(a, b) (Lectue 4) Characterize B [a, 17 as the completion w.r.T. Gauss norms 1-la, 1-lb

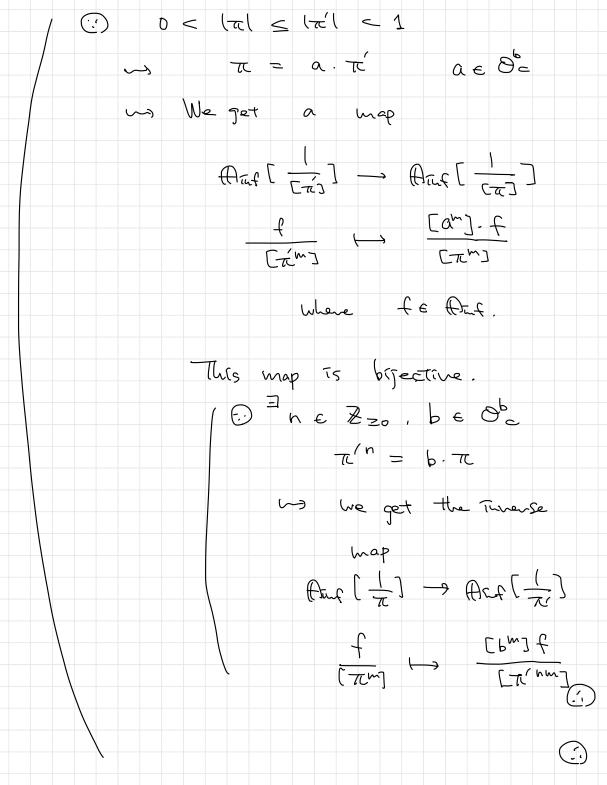


Auf [(T)] Fix a guasi-unifornizar TC E Cb A Tuf [[7]]: local zation $f = \sum_{n \geq 0} [c_n] p^n$ - 1 Cm J p" V Cm V : anydernt (= \(\sum \) (\tau \) (\tau \) \\

\[
\text{anydernt} \frac{1}{2} = \text{Can} \]

\[
\text{cam} \]

\[
\text{vepresured(0)} \] $f = \sum_{n=1}^{\infty} \frac{C_n}{n} p^n |C_n| \le 1$ This Terdamüller expansion is Auf [Tai] does not depend an the choice of the quasi-uniformina



Since
$$O \models i$$
 P -adically complete \mathbb{R} the characteristic O ,

we got \mathbb{R}

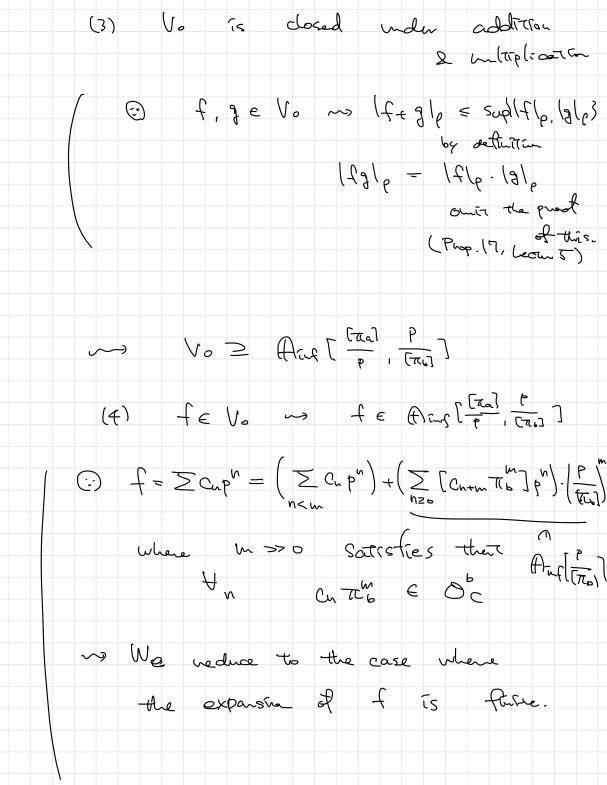
$$\mathbb{R}$$

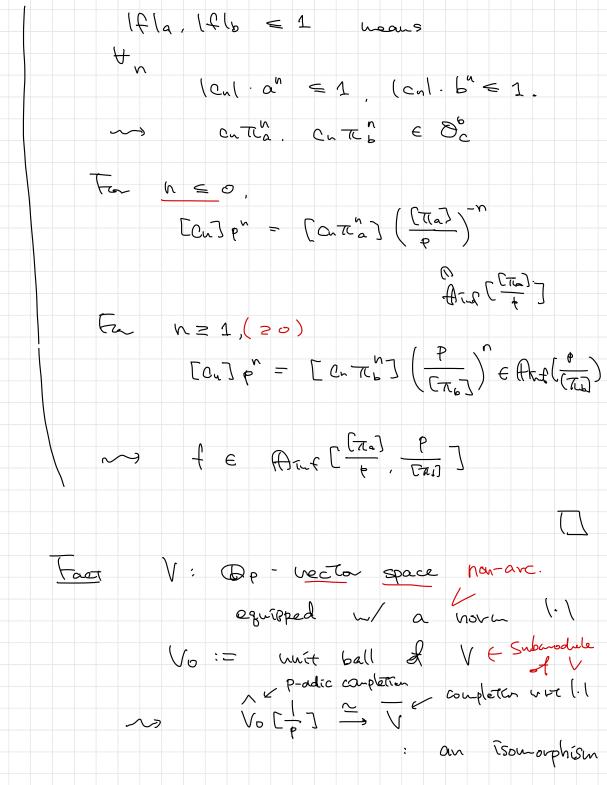
Inl.1 E Rz.

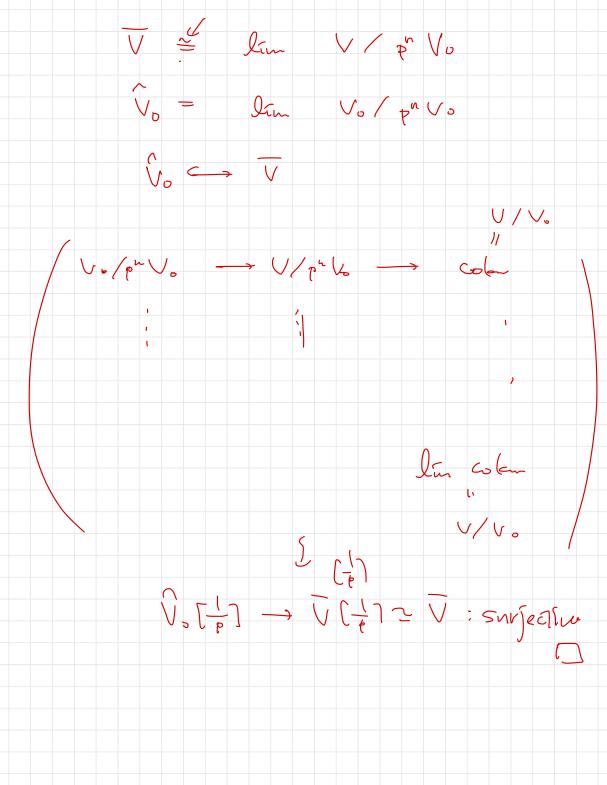
 $|\pi_0| = \alpha$, $|\pi_0| = 6$

@ Gauss norm Def. (Gauss norm) 0< p< 1 E TR t = > [cu] pr & Aut [+, ca]] (c e c) (flp := Sup } (Cul.ph } this is well-defined

gince ? I Cul? is bounded Notation: (1) T= ? witilt of Cb of duar o? (2) For every y = (k, c), he have Os: Auf [P. Tan] -> K. $f(y) := \theta_y(f) \in K$ (fe Auf [f, [n]]) Traibs & T : andors (3) 3 y = (t,1) | a = |p| + = 63







Brain is the completion of Auf [2, [2]] W. L. Z. (. la+1. lb Vo = Oruf [(To) P (Tai) Baba = Vo [=] ~ V