PDE 数值解作业为: 1. Nini,jn+ Nini,jn + Nin,jn+ Nin,jn- 4 Nij-22 fij = $hux + huy + \frac{h^2}{5}uxx + \frac{h^2}{5}uyy + Uxy + \frac{h^3}{5}(uxxx + 3uxxy + 3uxyy + uyyy)$ + hwx - huy + h2 Uxx + h2 Uyy - uxy + h3 (Vxxx - 3Uxy+ 3Uxyy - Uyyy) - hux + huy + $\frac{h^2}{2}$ uxx + $\frac{h^2}{2}$ uyy - uxy + $\frac{h^3}{6}$ (- uxxx + 3uxxy - 3uxyy + uyyy) - h_{NN} - h_{Ny} + $\frac{h^2}{2}$ h_{NN} + $\frac{h^2}{2}$ h_{Ny} - h_{NN} - h_{NN -2h2 fij +0(h4) = o(h4) 2. \$\frac{1}{2} Y_{i} = (i+\frac{1}{2}) \Delta Y , \Pi_{j} = \int \Delta \theta , \Pi_{j} \righta Y_{i} + \frac{1}{2} U \text{in ij} - \left(\Gamma_{i} + \Gamma_{i} - \frac{1}{2} \text{U in ij} + \Gamma_{i-\frac{1}{2}} \text{U in ij} $\Upsilon_i (\Delta \gamma)^2$ $+ \frac{|V_{ij}|_{H_i} - |V_{ij}|_{H_i}}{|V_{ij}|_{H_i}} = f_{ij}$ 双色的边界部件的 2 (Mij- Noij)+ 4 (MojH-2Noij+NojH)=foij 为=所差分格式 3. 芳取奶瓜瓶、且不为常散、刚此时主: st. Uin, With 中枢在一个比以大 => Ln vi< - LOiUH-biVH-CiVHI)<0 节值、发动级 秀高、Lhvi=lfil Vo=VN=O, 左Wi+=Vi+ui 则为 i=1.2,..., N-1 \$ 1 | Lnuil= | fil ≤ Lh Vi => Lhwi >0 又i=0,N町、Wi=2 切Wi=>0 5/7 |uil = vi, 7 vi = 1fil => max |uil = max di