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    "06 FÃ©vrier 2020"
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    "T=10.0\n",
    "# Vitesse de transport\n",
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    "# Valeur de omega\n",
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    "# Valeur de nu\n",
    "nu=0.01\n",
    "# Valeur de k\n",
```

```
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    "# Valeur de p \n",
    "p=5\n",
    "\n",
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    "# Conditions aux limites et initiales\n",
    "#####################################\n",
    "# Condition aux limites : anticorps en x=0\n",
    "def cd(t):\n",
    "    return t*exp(-t/2)\n",
    "CD=sc.vectorize(cd)\n",
    "# Condition initiale des anticorps \n",
    "def c0(x):\n",
    "    return 0.0\n",
    "C0=sc.vectorize(c0)\n",
    "# Condition initiale des antigÃ¨nes \n",
    "def s0(x):\n",
    "    return 10.0\n",
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    "# Nombre de pas de temps\n",
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    "#######################################################\n",
    "# Pas d'espace\n",
    "DELTAX=L/NX\n",
    "# Nombre de pas de temps\n",
    "DELTAT=T/NT\n",
    "# Condition CFL\n",
    "CFL=DELTAT/DELTAX\n",
    "\n",
    "#############################\n",
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```

```
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    "tempsaffichage=0.0\n",
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    "S=S0(x)\n",
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    "SNEW=np.zeros(np.size(S))"
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    "    for i in range(0,NX+1):\n",
    "        SNEW[i]=S[i]*(1.0-DELTAT*p*k*C[i])\n",
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