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outputT=load('temperature_data100'); xt=outputT(:,1); t=outputT(:,2); fs=16; lw=2; format('long')
% figure % subplot(1,1,1) % plot(xt,t,'b','linewidth',lw); % set(gca,'fontsize',fs) % xlabel('x[m]') %
ylabel('T[K]') % grid on N=size(t); szz=N(1)-1; maxT=max(t) t80=t(0.8*szz);
outputData=load('heatcurrent_data100'); xh=outputData(:,1); h=outputData(:,2); sh=size(h);
szh=sh(1); hc1=h(1); hc2=h(szh); h80=h(0.8*szz); % figure % subplot(1,1,1) %
plot(xh,h,'b-','linewidth',lw); % set(gca,'fontsize',fs) % xlabel('x[m]') % ylabel('j [W/m^2]') % grid
on outputData=load('Sdiffdata100'); xDi=outputData(:,1); hDi=outputData(:,2); % figure %
subplot(1,1,1) % plot(xDi,hDi,'r+', 'linewidth',1); % set(gca,'fontsize',fs) % xlabel('x[m]') %
ylabel('h[W/m^3]') % grid on outputData=load('Sdata100'); xS=outputData(:,1);
hS=outputData(:,2); % % figure % subplot(1,1,1) % plot(xS,hS,'b-','linewidth',2); %
set(gca,'fontsize',fs) % xlabel('x[m]') % ylabel('S[W/m^3]') % grid on s=size(hS); ss=s(1)-2;
kk=zeros(ss,1); for i=1:ss kk(i,1)=hS(i+1); end err=hDi-kk; maxErr=max(abs(err)); % % figure %
subplot(1,1,1) % plot(xDi,err,'b-','linewidth',lw); % set(gca,'fontsize',fs) % xlabel('x[m]') %
ylabel('h[W/m^3]') % grid on outputData=load('sine80.dat'); n=outputData(:,1);
t80=outputData(:,2); j80=outputData(:,3); s1=size(n); s2=s1(1); N=zeros(s2,1); for i=1:s2
N(i,1)=n(i,1)^(-1); end % % figure % subplot(1,1,1) % plot(N,j80,'b-o','linewidth',lw); %
set(gca,'fontsize',fs) % xlabel('1/N') % ylabel('j [W/m^2]') % grid on outputData=load('maxT.dat');
n=outputData(:,1); tmax=outputData(:,2); s1=size(n); s2=s1(1); N=zeros(s2,1); for i=1:s2
N(i,1)=n(i,1)^(-2); end figure subplot(1,1,1) plot(N,tmax,'b-o','linewidth',lw); set(gca,'fontsize',fs)
xlabel('1/N^2') ylabel('Tmax[K]') grid on

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