

$$(\Omega,\mathcal{F},P)\\ \overline{D=}\\ (D_t)_{t\geq 0}\\ \psi\psi\nu;\\ D$$

$$E[e^{-sD_t}]=e^{-t\psi(s)},\psi(s)=\int\limits_0^{\infty}(1-e^{-sy})\nu(dy),s>0,$$

$$\int_0^\infty (y\wedge 1)\nu(dy)<\\ \infty\\ \nu\nu(0,\infty)=\\ \overline{E=}\\ (E(t))_{t\geq 0}D$$

$$E(t):=\inf\{u>0;D_u>t\},t\geq 0.$$

$$EEB(t)\\ \overline{D(t)}\\ B(\overline{E(t)})D(t)E(t)E(t)B(E(t))B(E(t))\\ \overline{S=}\\ (l,r)\\ -\infty\leq\\ l\leq\\ r\leq\\ \infty\\ a,bS\rightarrow\\ \overline{S}\\ dy(t)=a(y(t))dE(t)+b(y(t))dB(E(t)),t\geq 0,y(0)\in S\\ P(y(t)\in S,t\geq 0)=1.$$

$$b(x)>\\ 0\\ \overline{x}\in\\ \overline{S}\\ F(x)=\lambda\int\limits^x\frac{1}{b(y)}dy$$

$$(1)\\ \lambda>\\ 0,F^{-1}:\\ \overline{F(S)}\rightarrow\\ \overline{S}\\ x(t)=\\ F(y(t))\text{?}\wedge\circ$$

$$dx(t)=f(x(t))dE(t)+\lambda dB(E(t))t\geq 0,x(0)\in \overline{F(S)}$$

$$f(x)=\lambda\left(\frac{a(F^{-1}(x))}{b(F^{-1}(x))}-\frac{1}{2}b'(F^{-1}(x))\right),x\in F(S),$$

$$F(D)=\\ (F(l),F(r)).\\ \overline{T}>\\ 0f$$

$$\sup_{t\in[0,T]}E\left|f'(x(t))\right|+\sup_{t\in[0,T]}E\left|f(x(t))'f(x(t))+\frac{\sigma^2}{2}f''(x(t))\right|<\infty.$$

$$(2)\\ \text{?}\\ \overline{H}\subseteq\\ \overline{L(B(t),\mathcal{F}_t)}\\ H_{E(t-)}\in\\ \overline{L(B_{E(t)},\mathcal{F}_{E_t})}\\ t0$$

$$\int_0^{E_t}H_sdB(s)=\int_0^tH_{E(s-)}dB_{E(s)}.$$

$$\overline{D}\\ \overline{E}\\ \overline{[D]}\longrightarrow\\ \overline{[E]}\\ \overline{[D]}\longleftarrow\\ \overline{[E]}\\ \overline{B}\\ \overline{E}\\ \overline{K}\subseteq\\ \overline{L(B_{E(t)},\mathcal{F}_{E_t})}\\ (\overline{K_{D(t-)}})\in$$