

Hochschild–Kostant–Rosenberg decompositions for surfaces

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κ	surface S	HH ¹ (S)		$h^0(\omega_S^\vee)$	HH ² (S)		HH ³ (S)	
		$h^0(\mathcal{T}_S)$	$h^1(\mathcal{O}_S) = q$		$h^1(\mathcal{T}_S)$	$h^2(\mathcal{O}_S) = p_g$	$h^1(\omega_S^\vee)$	$h^2(\mathcal{T}_S)$
∞	\mathbb{P}^2	8	0	10	0	0	0	0
	$\mathbb{P}^1 \times \mathbb{P}^1$	6	0	9	0	0	0	0
	\mathbb{F}_2	7	0	9	1	0	0	0
	\mathbb{F}_n for $n \geq 3$	$n+5$	0	$n+6$	$n-1$	0	$n-3$	0
	$\text{Bl}_1 \mathbb{P}^2$	6	0	9	0	0	0	0
	$\text{Bl}_2 \mathbb{P}^2$	4	0	8	0	0	0	0
	$\text{Bl}_3 \mathbb{P}^2$	2	0	7	0	0	0	0
	$\text{Bl}_4 \mathbb{P}^2$	0	0	6	0	0	0	0
	$\text{Bl}_5 \mathbb{P}^2$	0	0	5	2	0	0	0
	$\text{Bl}_6 \mathbb{P}^2$	0	0	4	4	0	0	0
$\text{Bl}_7 \mathbb{P}^2$	0	0	3	6	0	0	0	
$\text{Bl}_8 \mathbb{P}^2$	0	0	2	8	0	0	0	
0	abelian surface	2	2	1	4	1	0	2
	bielliptic surface		1			0		
	Enriques surface	0	0	0	10	0	0	
	K3 surface	0	0	1	20	1	0	0
2	...							