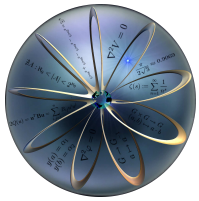

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Hilbert-Weyl theorem

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Theorem: Let Γ be a compact Lie group acting on V. Then there exists a finite Hilbert basis for the ring $\mathcal{P}(\Gamma)$ *(the set of invariant polynomials)*. [**?**]

proof:

In [**?**] on page 54.

Theorem:*(as stated by Hermann Weyl)*

The *(absolute)* invariants corresponding to a given set of representations of a finite or a compact Lie group have a finite integrity basis. [**?**]

proof:

In [**?**] on page 274.

References

[GSS] Golubitsky, Martin. Stewart, Ian. Schaeffer, G. David.: Singularities and Groups in Bifurcation Theory *(Volume II)*. Springer-Verlag, New York, 1988.

[HW] Hermann, Weyl: The Classical Groups: Their Invariants and Representations. Princeton University Press, New Jersey, 1946.